

SIXTH YEARBOOK


OF THE NATIONAL ASSOCIATION OF
SECONDARY-SCHOOL PRINCIPALS

NATIONAL ASSOCIATION OF
SECONDARY-SCHOOL PRINCIPALS

Published by the Association 1933

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SIXTH YEARBOOK

of the NATIONAL ASSOCIATION *of*
SECONDARY-SCHOOL PRINCIPALS

Edited by

H. V. CHURCH

Secretary of the Association

Published by the Association 1922

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1966

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H. V. CHURCH

Secretary of the Association

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THE OFFICERS OF THE ASSOCIATION

1922-1923

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Principal of High School

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Principal of the Washington School

New York City

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Principal of J. Sterling Morton High School

Cicero, Illinois

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Principal of Manual Training High School, Denver, Colorado

EDMUND D. LYON

Principal of East High School, Cincinnati, Ohio

MERLE PRUNTY

Principal of Central High School, Tulsa, Oklahoma

DIRECTORY

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS 1922

- 1919 HARRY D. ABELLS, S.B.
Superintendent, Morgan Park Military Academy; Morgan Park, Illinois.
- 1920 J. E. ADAMS, B.S., '87; Ph.D., '91.
1915, *Principal*, Waller High School; Chicago, Illinois.
- 1920 W. S. ADAMS.
Delevan, Illinois.
- 1919 SISTER MARY AGNES.
Villa de Chantal; Rock Island, Illinois.
- 1921 DWIGHT ALDEN.
Newfield, Maine.
- 1919 J. A. ALEXANDER.
Hutsonville, Illinois.
- 1921 W. O. ALLEN, A.B., '10.
1919, *Principal*, Washington Irving Junior High School; Des Moines, Iowa.
- 1920 CARL W. ALLISON.
1919, *Principal*, Jersey Township High School; Jerseyville, Illinois.
- 1920 ADA ANDREWS.
Dundee, Illinois.
- 1918 GEORGE E. ANSPAUGH, A.B., '09; A.M., '16.
1916, *Superintendent* of Schools, Farmer City and *Principal* of Moore Township High School; Farmer City, Illinois.
- 1920 CHRIS S. APT.
Terre Haute, Illinois.
- 1921 A. E. ARENDT.
Collinsville, Illinois.
- 1921 J. E. ARMSTRONG.
Principal, Englewood High School; Chicago, Illinois.
- 1922 HARRY R. ATKINSON.
Battle Creek, Michigan.
- 1921 E. T. AUSTIN.
Sterling, Illinois.
- 1918 JOHN M. AVERY, A.B., '14.
1914, *Principal*, Public High School; Hillsboro, Illinois.
- 1918 W. C. BAER, A.B., '11.
1913, *Principal*, Danville High School; Danville, Illinois.
- 1922 JOHN FRANKLIN BAILEY, A.B., '03; A.M., '04.
Principal, Servin Junior High School, 48 Hemphill St., N. S., Pittsburgh, Pennsylvania.
- 1921 H. V. BALDWIN.
Fulton, Illinois.

- 1921 RICHARD W. BARDWELL.
Woodstock, Illinois.
- 1921 V. H. BARKER.
Sparland, Illinois.
- 1919 V. G. BARNES.
Principal, Madison High School; Madison, Wisconsin.
- 1921 V. H. BARNES.
Scotland, Illinois.
- 1921 J. W. BARNEY, A.B., '10.
1920, *Principal*, High School; Munising, Michigan.
- 1920 H. L. BARR.
Stockland, Illinois.
- 1921 L. W. BATES, B.S., '13.
1920, *Principal*, High School; Cherokee, Iowa.
- 1918 R. G. BEALS, A.B.; A.M.
1912, *Principal*, Taylorville Township High School; Taylorville, Illinois.
- 1916 WILFRED F. BEARDSLEY, A.B., '93.
1906, *Principal*, Evanston Township High School; 1704 Hinman Ave., Evanston, Illinois.
- 1920 RAY H. BECHTOLD.
Hettick, Illinois.
- 1918 ERNEST J. BECKER, A.B., '94; Ph.D., '98.
1909, *Principal*, Eastern High School; Baltimore, Maryland.
- 1919 LULU B. BECKINGTON, A.B., '12.
1918, *Principal*, Belvidere High School; 628 South State St., Belvidere, Illinois.
- 1921 HENRY D. BEDFORD, A.B.
1920, *Superintendent*, Consolidated Schools; Plainfield, Illinois.
- 1918 GRANT BEEBE, B.S., '88.
1913, *Principal*, Calumet High School; 8025 Normal Avenue, Chicago, Illinois.
- 1920 R. E. BEEBE.
Principal, Township High School; Mendota, Illinois.
- 1920 F. A. BELL.
Buda, Illinois.
- 1921 P. E. BELTING.
College of Education, University of Illinois; Urbana, Illinois.
- 1922 C. BEMER.
Principal, High School; Sault Ste. Marie, Michigan.
- 1920 FRANK A. BEN.
Crystal Lake, Illinois.
- 1919 A. F. BENSON, M.P., '13.
1918, *Principal*, Charles M. Jordan Junior High School; Thirty-second and Emerson Ave., N., Minneapolis, Minn.

- 1922 ELMA H. BENTON, A.B., A.M.
1919, *Principal*, Hosmer Hall; St. Louis, Missouri.
- 1921 B. C. BERG, A.B., '16.
1920, *Principal*, High School; Newton, Iowa.
- 1921 W. W. BERRY.
66 North Fourth Street, Martin's Ferry, Ohio.
- 1921 E. G. BESSE.
Scarboro, Maine.
- 1919 CARL G. BICKEL, B.S., '16; M.S., '18.
1921, *Principal*, Warrensburg Community High School, Warrensburg, Illinois.
- 1918 FRED L. BIESTER, A.B., '14.
1919, *Principal*, Glen Ellyn Township High School; Glen Ellyn, Illinois.
- 1922 DE HULL BLACK.
Eaton Rapids, Michigan.
- 1919 F. L. BLACK, A.M., '08.
1918, *Principal*, Lockport Township High School; Lockport, Illinois.
- 1919 H. B. BLACK.
Mattoon, Illinois.
- 1921 R. E. BLACK.
Sesser, Illinois.
- 1916 H. E. BLAINE,
Joplin, Missouri.
- 1916 LOUIS J. BLOCK, A.B., '68; A.M., '72; Ph.D., '82.
1895, *Principal*, John Marshall High School; 3250 W. Adams Street, Chicago, Illinois.
- 1922 RUTH BLOKKINK.
Principal, High School; Lowell, Michigan.
- 1920 H. J. BLUE.
Carlinville, Illinois.
- 1920 C. W. BOARDMAN, Ph.B., '08.
1916, *Assistant Principal*, Central High School; Minneapolis, Minnesota.
- 1920 OSCAR L. BOCHSTAHLER,
Monticello, Illinois.
- 1922 ROY A. BOCK.
1920, *Principal*, High School; Holly, Michigan.
- 1916 WM. J. BOGAN, Ph.B., '09.
1905, *Principal*, Lane Technical School; 1225 Sedgwick St., Chicago, Illinois.
- 1920 VANA H. BOLT.
East Peoria, Illinois.
- 1921 JOHN H. BOSSHART, A.B., '02.
1920, *Principal*, Columbia High School; South Orange, New Jersey.

- 1921 A. W. BOSTON.
Westbrook, Maine.
- 1920 CLARENCE W. BOSWORTH, A.B., '09; A.M., '10.
1917, *Principal*, Cranston High School; Auburn, Rhode Island.
- 1918 E. O. BOTTENFIELD, Ph.B., '16.
1916, *Principal*, Sparta Township High School; 501 N. Vine St., Sparta, Illinois.
- 1919 B. R. BOWDEN, Ph.B., '17; Ph.M., '18.
1917, *Superintendent of Schools*, *Principal*, Community High School; Gilman, Illinois.
- 1919 WILLIAM W. BOWERS.
Seneca, Illinois.
- 1918 E. L. BOYER.
Principal, Bloom Township High School; Chicago Heights, Illinois.
- 1921 RAY H. BRACEWELL, B.S., '15.
1919, *Principal*, High School; Burlington, Iowa.
- 1917 CHARLES A. BRADLEY, U. S. Military Academy, '77; D.Sc., '16.
1893, *Principal*, Manual Training High School; 2243 Race Street, Denver, Colorado.
- 1920 S. M. BRAME, A.B., '02.
1909, *Principal*, Bolton High School; Alexandria, Louisiana.
- 1919 H. D. BRASEFIELD, Ph.B., '91.
1917, *Principal*, Fremont High School; 460 Hanover Avenue, Oakland, California.
- 1920 ARNO BRATTEN.
Marion, Illinois.
- 1916 JACOB P. BREIDINGER, A.B., '85; A.M., '88.
1901, *Principal*, High School; 15 N. Franklin Street, Wilkes-Barre, Pennsylvania.
- 1921 J. H. BRENNEMAN, B.A., '04; B.A., '20.
1920, *Principal*, High School; 713 North Fifth Street, Ottumwa, Iowa.
- 1920 R. J. BRETNALL.
Boulder, Colorado.
- 1918 FRANCIS A. BRICK.
Bayonne, New Jersey.
- 1920 BERTHA BRIDGES.
Atlanta, Illinois.
- 1916 C. P. BRIGGS, A.B., '01.
1920, *Principal*, Lakewood High School; Lakewood, Ohio.
- 1920 EUGENE S. BRIGGS.
Okmulgee, Oklahoma.
- 1921 J. O. BRIGGS.
Sidney, Illinois.

- 1916 THOMAS H. BRIGGS, Ph.D., '14.
1915, *Professor of Education*, Teachers College, Columbia University; 525 West 120th Street, New York, New York.
- 1920 L. O. BRIGHT, A.B.
1920, *Principal*, Antioch Township High School; Antioch, Illinois.
- 1920 J. H. BRILL,
Bement, Illinois.
- 1920 A. B. BRISTOW.
Matthew Fontaine Maury High School; Norfolk, Virginia.
- 1916 L. W. BROOKS, A.B., '03; A.M., '15.
1919, *Principal*, Wichita High School; Wichita, Kansas.
- 1921 M. M. BROOKS.
Buckhannon High School, Buckhannon, West Virginia.
- 1916 WENDELL S. BROOKS, B.A., '08.
1914, *Headmaster*, The Brooks School for Boys; 1535 Central Ave., Indianapolis, Indiana.
- 1919 C. A. BROTHERS.
Dwight, Illinois.
- 1916 B. FRANK BROWN, A.B., '91; A.M., '98.
1912, *Principal*, Lake View High School; 4015 N. Ashland Ave., Chicago, Illinois.
- 1916 EDWARD L. BROWN, A.B., '86; A.M., '90; Lit.D., '14.
1898, *Principal*, North Side High School; 3324 Zuni Street, Denver, Colorado.
- 1918 GEORGE A. BROWN, C. E., '81.
1897, *Managing Editor*, "School and Home Education";
Bloomington, Illinois.
- 1922 MARY M. BROWN.
Portland, Michigan.
- 1920 V. I. BROWN, A.B., '19.
1920, *Principal*, Community High School; Watseka, Illinois.
- 1922 WALKER W. BROWN.
Stoughton, Wisconsin.
- 1920 ROBERT BROWNE.
Pittsfield, Illinois.
- 1919 CHARLES BRUNER, A.B., '10; M.A., '13.
1919, *Principal*, High School; Kewanee, Illinois.
- 1921 GEORGE F. L. BRYANT, B.S., '17.
1920, *Principal*, Porter High School; Kezar Falls, Maine.
- 1922 W. C. BUCHANNAN, A.B.
East Lansing, Michigan.
- 1916 BENJAMIN F. BUCK, A.B., '93.
1913, *Principal*, Senn High School; 5900 Glenwood Ave.,
Chicago, Illinois.

- 1916 GEORGE BUCK, A.B., '91; A.M., '01.
1910, *Principal*, Shortridge High School; Cor. Michigan and
Penn Sts., Indianapolis, Indiana.
- 1918 B. R. BUCKINGHAM, Pd.B., '01; Ph.D., '13.
1921, *Director of Educational Research*, Ohio State Univer-
sity; Columbus, Ohio.
- 1920 J. B. BUCKLER.
Minonk, Illinois.
- 1919 H. C. BUELL,
Polo, Illinois.
- 1917 P. C. BUNN, Ph.B., '09.
1914, *Principal*, High School; 860 Sixth St., Lorain, Ohio.
- 1920 A. J. BURNS.
Sterling, Illinois.
- 1921 EVA BURNET, B.A., '07; M.Di., '19.
1920, *Principal*, High School; Allerton, Iowa.
- 1921 HARRY H. BURNHAM.
Biddeford, Maine.
- 1920 A. J. BURNS.
Sterling, Illinois.
- 1917 ALDEN JAMES BURTON, A.B., '08.
1918, *Principal*, East High School; Des Moines, Iowa.
- 1921 RALPH H. BUSH.
Joliet Township High School; Joliet, Illinois.
- 1916 WILLIAM M. BUTLER, A.B., '77.
1909, *Principal*, Yeatman High School; 3616 N. Garrison
Ave., St. Louis, Missouri.
- 1920 C. C. BYERLY.
Princeville, Illinois.
- 1922 C. E. BYERS, A.B., '11; A.M., '13.
1915, *Principal*, High School; Huntington, Indiana.
- 1920 LEE BYRNE, A.B.; A.M., '17; Ph.D.
1920, *Supervisor of High-School Instruction*; 916 North
Haskell Avenue, Dallas, Texas.
- 1922 W. H. CAIN.
Western Normal High School; 717 West Lovell Street, Kala-
mazoo, Michigan.
- 1920 L. L. CALDWELL, A.B., '13.
1917, *Superintendent of Schools*, Monmouth, Illinois.
- 1921 D. G. CALVERT.
De Pue, Illinois.
- 1922 WILLIAM CARDEW.
Trenary, Michigan.
- 1921 R. CARLEY.
Ogden, Illinois.
- 1922 GEORGE N. CARMAN, A.B., '81; A.M., '06.
1895, *Director*, Lewis Institute; Chicago, Illinois.

- 1919 J. W. CARRINGTON.
Washburn, Illinois.
- 1920 L. R. CARSON.
Auburn, Illinois.
- 1920 RUBY CARTWRIGHT.
Minier, Illinois.
- 1920 JOHN LINTON CARVER, B.L., '93; A.M., '03; Ph.D., '05.
1917, *Principal*, Friends, Seminary; 226 East Sixteenth St.,
New York.
- 1921 J. W. CASTELO.
La Moile, Illinois.
- 1919 THOMAS C. CHAFFEE, A.B., '02.
1914, *Principal*, Gardiner High School; 216 Brunswick Ave-
nue, Gardiner, Maine.
- 1921 L. W. CHALCROFT.
Valmeyer, Illinois.
- 1921 CLAUDE S. CHAPPELEAR.
Sugar Grove, Illinois.
- 1919 LEO E. CHANNON.
1919, *Principal*, Donovan Township High School; Donovan,
Illinois.
- 1921 ELIZABETH CHAPMAN.
Principal, Dixfield High School; Dixfield, Maine.
- 1922 IVAN CHAPMAN.
Western High School; Detroit, Michigan.
- 1919 L. W. CHATHAM, B.S., '10; M.S., '17.
1919, *Principal*, Pana Township High School; Pana, Illinois.
- 1917 JOHN O. CHEWNING, A.B., '01.
1916, *Principal*, Central High School; Sixth and Vine Sts.,
Evansville, Indiana.
- 1916 HARRY VICTOR CHURCH, Ph.B., '94.
1899, *Principal*, J. Sterling Morton High School; Twenty-fifth
St. and Sixtieth Ave., Cicero, Illinois.
- 1922 A. H. CLARK.
Principal, Hamtramck School; Detroit, Michigan.
- 1919 A. L. CLARK, B.S.
1048 Nineteenth St., Des Moines, Iowa.
- 1922 M. CLAY.
Caro, Michigan.
- 1921 HAROLD P. COBB.
South Windham, R. No. 1, Maine.
- 1921 JOHN L. COBB.
Lostant, Illinois.
- 1920 M. B. COKER.
Louisville, Illinois.
- 1921 J. R. COLBERT.
Greenfield, Illinois

- 1919 W. P. COLBURN, Ph.B., '05.
1912, *Superintendent and Principal*, Rhinelander Schools; 4
N. Baird Avenue, Rhinelander, Wisconsin.
- 1922 C. F. COLE, Ph.B.
1907, *Principal*, West High School; Green Bay, Wisconsin.
- 1922 M. F. COLE.
Lincoln High School; Ferndale, Michigan.
- 1919 G. H. COLEBANK.
1914, *Principal*, Fairmont High School; Fairmont, West
Virginia.
- 1920 G. R. COLLINS.
Westville, Illinois.
- 1922 E. M. CONKLIN.
Marshall, Michigan.
- 1922 WILLIAM L. CONNOR, A.B., '14.
1920, *Principal*, Longwood High School; 432 East 109th
Street, Cleveland, Ohio.
- 1921 (MRS.) NELLIE CONRARDY.
La Harpe, Illinois.
- 1921 A. F. COOK.
Superintendent, Hinsdale, Illinois.
- 1916 R. R. COOK, A.B., '08.
1918, *Principal*, Topeka High School; Topeka, Kansas.
- 1917 WALTER FRANCIS COOLIDGE, A.B., '99; A.M., '01; A.M., '14.
1913, *Principal*, Granite City High School; 2325 D. St., Gran-
ite City, Illinois.
- 1921 W. C. COOMBS.
Principal, Livermore High School; Livermore Falls, Maine.
- 1921 R. J. CORNELL, A.B., '19.
1918, *Principal*, Amos Hiatt Junior High School; Des Moines,
Iowa.
- 1922 J. H. CORNS.
Principal, Southeastern High School; Detroit, Michigan.
- 1919 J. W. COSTELO.
La Moile, Illinois.
- 1921 ANNA E. COUGHLIN.
Rockland, Maine.
- 1920 H. M. COULTRAP, A.B., '08; A.M., '14.
1912, *Superintendent of Schools*; Geneva, Illinois.
- 1921 RUTH L. COULTER, Ph.B., '14.
1919, *Principal*, High School; Forest City, Iowa.
- 1919 PHILIP W. L. COX, A.B., '05.
1920, *Principal*, The Washington School of New York; 17
East Sixteenth Street, New York.
- 1917 JOHN A. CRAIG, A.B., '09; A.M., '10.
1915, *Principal*, Muskegon High and Hackley Manual Train-
ing School; 178 W. Webster Ave., Muskegon, Michigan.

- 1919 R. B. CRAIG.
Kinmundy, Illinois.
- 1919 J. H. CRANN, B.Sc., '06.
1918, *Principal*, York Community High School, Elmhurst,
Illinois.
- 1918 J. R. CRANOR.
Gibson City, Illinois.
- 1922 LEWIS D. CRAWFORD.
Mattawan, Michigan.
- 1922 FRED H. CRONINGER, B.S., '05.
1921, *Principal*, High School; Fort Wayne, Indiana.
- 1921 H. E. CROOKER.
Berwick Academy; South Berwick, Maine.
- 1921 G. A. CROSTHWAITE.
Yates City, Illinois.
- 1920 H. H. CULLY, A.B., '87.
1905, *Principal*, Glenville High School; Cleveland, Ohio.
- 1919 F. L. CUMMINGS, A.B., '04; A.M., '11.
1916, *Principal*, Fergus County High School, 1007 W. Blvd.,
Lewistown, Montana.
- 1921 FRANK CUNNINGHAM.
Mapleton, Maine.
- 1921 REX W. DALE.
Flora, Illinois.
- 1919 JAMES D. DARNELL, A.B., '16; M.A., '17.
1919, *Principal*, Township High School; Geneseo, Illinois.
- 1921 ALFRED DAVIS.
Jonesport, Maine.
- 1922 CALVIN O. DAVIS.
Professor of Secondary Education, University of Michigan;
Ann Arbor, Michigan.
- 1917 GEORGE E. DAVIS, A.B., '02; A.M., '09.
1919, *Principal*, Walnut Hills High School, Cincinnati, Ohio.
- 1916 JESSE B. DAVIS, A.B., '95; A.M., '11; A.M., (Hon.) '16.
1920, *Supervisor of Secondary Education*; State House, Hart-
ford, Connecticut.
- 1921 M. G. DAVIS, A.B., '14; A.M., '20.
1918, *Principal*, High School; Grinnell, Iowa.
- 1917 THOMAS M. DEAN, A.B., '08; A.M., '15.
1916, *Principal*, Decatur High School; Decatur, Illinois.
- 1919 H. A. DEAN.
Superintendent of Schools; Crystal Lake, Illinois.
- 1920 C. E. DEBUTTS, A.M., '88.
1919, *Assistant Superintendent of Schools*; 650 South Clark
Street, Chicago, Illinois.
- 1920 A. E. DECKER.
Augusta, Illinois.

xviii *National Association of Secondary-School Principals*

- 1920 CHARLES E. DECKER.
Kewanee, Illinois.
- 1919 E. M. DEEM.
Mahomet, Illinois.
- 1920 R. A. DEFFENBAUGH.
Rochelle, Illinois.
- 1919 R. R. DENISON, A.B., '10.
1918, *Principal*, Township High School; Lawrenceville, Illinois.
- 1920 LOIS E. DENNIS.
Homer, Illinois.
- 1919 F. J. DESMOND, B.S., '11; A.B., '17; LL.B., '19; A.M.
1919, History Department, Washington High School Milwaukee, Wisconsin.
- 1916 JOHN A. DEVLIN, B.S., '02; M.S., '18.
1918, *Principal*, Atchison County High School; Effingham, Kansas.
- 1918 JOHN C. DIEHL A.B., '87; A.M., '03.
1919, *Principal*, Academy High School; 510 Myrtle St., Erie, Pennsylvania.
- 1921 RAY O. DIETHER, B.A., M.A.
1919, *Principal*, High School; *Supervising Principal*, Grammar School; Big Pine, California.
- 1922 FRANK B. DILLEY, A.B., A.M.
Principal, John Hancock School, Ohio University; Athens, Ohio.
- 1920 RAY DODGE.
Christopher, Illinois.
- 1921 A. A. DODD.
Principal, Manual Training High School; Kansas City, Missouri.
- 1920 H. S. DOOLITTLE, A.B., '15.
1917, *Principal*, Saginaw Eastern High School; Saginaw, Michigan.
- 1921 J. T. DORRIS.
Waverly, Illinois.
- 1917 JAMES E. DOWNEY, A.B., '97; A.M., '05.
Principal, High School of Commerce; Boston, Massachusetts.
- 1920 OTTO F. DUBACH, Ph.B., '98; Ph.M., '06.
1920, *Principal*, Central High School; Kansas City, Missouri.
- 1922 M. E. DUCKLES.
New Trier Township High School; Kenilworth, Illinois.
- 1920 F. J. DU FRAIN, A.B., '16.
1921, *Principal*, High School; Pontiac, Michigan.
- 1921 SMITH DUNNACK.
Somerset Academy; Athens, Maine.

- 1916 E. J. EATON, A.B., '04; A.M., '19.
1920, *Principal*, South High School; Youngstown, Ohio.
- 1918 SILAS ECHOLS, B.A., '05.
1915, *Principal*, High School; 612 Broadway, Mt. Vernon,
Illinois.
- 1921 BROTHER ELIGINS.
Holy Trinity High School; Chicago, Illinois.
- 1921 L. W. ELKINS.
Kennebunk, Maine.
- 1918 CARLOS B. ELLIS.
1910, *Principal*, High School of Commerce; Springfield,
Massachusetts.
- 1922 MARTHA E. ENERY.
Fairfield, Iowa.
- 1918 FRANK S. EPSEY.
1917, *Principal*, Roberts High School; *Superintendent* of Dist.
No. 40; Roberts, Illinois.
- 1921 ALBERT W. EVANS.
Wendell Phillips High School; Chicago, Illinois.
- 1922 GEORGE W. EVANS.
1905, *Principal*, Charleston High School; Boston, Massa-
chusetts.
- 1920 E. J. EVANS.
Hutsonville, Illinois.
- 1916 CHARLES D. EVERETT, A.B., '80; A.M., '93.
1893, *Principal*, North High School; Fourth and Dennison
Ave., Columbus, Ohio.
- 1920 WILLIAM F. EWING, A.B., '06; M.A., '19.
1920, *Principal*, Pasadena High School; Pasadena, California.
- 1918 CHAS. B. FAGER, JR., A.M., '93; M.D., '93; Sc.D., '11.
1905, *Principal*, Technical High School; 2417 N. Front St.,
Harrisburg, Pennsylvania.
- 1919 D. B. FAGER.
Palestine, Illinois.
- 1921 CLINTON E. FARNHAM, A.B., '11; A.M., '17.
1916, *Headmaster*, Academic High School; New Britain, Con-
necticut.
- 1919 ELIZABETH FAULKNER, A.B., '85.
1909, *Principal*, The Faulkner School; 4746 Dorchester Ave.,
Chicago, Illinois.
- 1919 N. R. FEASLEY, A.B., '14.
Downers Grove, Illinois.
- 1921 DAVID FELMLEY.
Normal, Illinois.
- 1918 BEULAH A. FENIMORE, B.S., '16; F.R.S.
1917, *Principal*, Kensington High School; Cumberland and
Amber Sts., Philadelphia, Pennsylvania.

- 1922 ELLEN FILEAN.
Humboldt, Iowa.
- 1918 RALPH E. FILES, A.B., '95.
1912, *Principal*, High School; East Orange, New Jersey.
- 1920 WALTER FINK.
Fairmont, Illinois.
- 1919 C. A. FISHER, A.B., '10; A.M., '19.
Principal, Central High School; Kalamazoo, Michigan.
- 1921 W. P. FLAHERTY.
Mokena, Illinois.
- 1918 M. L. FLANINGAM, B.S., '04; A.M., '14.
1908, *Principal*, Urbana High School; Indiana Ave., Urbana, Illinois.
- 1921 D. F. FLEMING, A.M.
1921, *Principal*, Community High School, Colfax, Illinois.
- 1917 IRA A. FLINNER, Ph.B., '06; A.B., '11; A.M., '20.
1911, *Headmaster*, Huntington School for Boys; 316 Huntington Ave., Boston, Massachusetts.
- 1919 LEWIS L. FORSYTHE, A.B., '04.
1917, *Principal*, Ann Arbor High School; 1314 Forest Ave., Ann Arbor, Michigan.
- 1919 L. M. FORT, B.A., '13.
1918, *Principal*, High School; Mitchell, South Dakota.
- 1921 G. HERBERT FOSS.
Fort Fairfield, Maine.
- 1921 H. A. FOSTER.
Belfast, Maine.
- 1922 BURTON P. FOWLER, A.B., '07.
1921, *Principal*, Central High School, Cleveland, Ohio.
- 1922 R. R. FOX.
Lake City, Michigan.
- 1920 BYRON FRAME.
Hoopeston, Illinois.
- 1921 CARL G. F. FRANZEN, A.B., '08; M.A., '12; Ph.D., '20.
1920, *Professor* of Secondary Education, Drake University; Des Moines, Iowa.
- 1921 WILL FRENCH, A.B., B.S., (Ed.)
1916, *Superintendent*; Winfield, Kansas.
- 1921 ELBERT K. FRETWELL, Ph.D.
1917, *Professor*, Teachers College, Columbia University; New York City.
- 1917 V. K. FROULA, A.B., '98.
1916, *Principal*, Broadway High School; 5043 Eighteenth Avenue, N. E., Seattle, Washington.
- 1916 L. A. FULWIDER, A.B., '95; A.M., '05.
1904, *Principal*, High School; 34 Lincoln Avenue, Freeport, Illinois.

- 1918 H. H. GADSBY, A.B., '86; Ph.D., '92.
1895, *Principal*, Drury High School; North Adams, Massachusetts.
- 1920 F. A. GANZER.
Armington, Illinois.
- 1922 H. E. GARDNER.
Principal, West Junior High School; Lansing, Michigan.
- 1922 MARY GARRISON.
Mendon, Michigan.
- 1922 LORENA M. GARY.
Athens, Michigan.
- 1921 C. W. GETHMANN, A.B., A.M., B.D.
1917, *Principal*, Shawnee High School; Shawnee, Oklahoma.
- 1920 W. C. GIESE.
Racine, Wisconsin.
- 1920 JULIUS GILBERT.
1918, *Principal*, High School; Beatrice, Nebraska.
- 1922 GEORGE H. GILBERT, JR., B.A., '14.
1917, *Principal*, High School; Wellesley Hills, Massachusetts.
- 1921 J. F. GILLILAND, A.B.
1910, *Principal*, Senior High School; Arkansas City, Kansas.
- 1919 W. E. GIVENS, A.B., '13; M.A., '15.
1919, *Principal*, McKinley High School; Honolulu, T. H.
- 1921 W. L. GLASCOCK, A.B., '05; A.M., '06.
San Mateo Union High School; San Mateo, California.
- 1916 RONALD P. GLEASON, B.Sc., '87.
1905, *Principal*, Technical High School; Scranton, Pennsylvania.
- 1916 W. L. GOBLE, B.S., '01.
1905, *Principal*, Elgin High School; Elgin, Illinois.
- 1920 H. A. GODDARD.
Waverly, Illinois.
- 1919 W. A. GOODIER.
Bloomington, Illinois.
- 1921 NELLIE GOODMAN, B.Di., '10; B.A., '12.
1919, *Principal*, High School; Independence, Iowa.
- 1920 V. W. GORMAN.
Indianola, Illinois.
- 1917 HARRY R. GORRELL, B.S., '06.
1909, *Principal*, Washington High School; Massillon, Ohio.
- 1918 THOMAS WARRINGTON GOSLING, A.B., '94; A.M., '04; Ph.D., '11.
1921, *Superintendent*; 22 West Dayton Street, Madison, Wisconsin.
- 1916 JOHN G. GRAHAM, A.B., '09; A.M., '14.
1915, *Principal*, High School; Huntington, West Virginia.
- 1918 V. BLANCHE GRAHAM, B.S., '94.
1910, *Principal*, High School; Naperville, Illinois.

- 1922 RUTH GRAHN.
McBrides, Michigan.
- 1922 CARL GREEN.
Flat Rock, Illinois.
- 1921 GEORGE M. GREEN.
Principal, Inglewood Union High School; Inglewood, California.
- 1921 JOSEPH GREEN.
Buxton, Maine.
- 1921 ELLEN M. GREGG.
Wheaton, Illinois.
- 1920 JULIA BELL GRISWOLD, A.B., '09; A.M., '15.
1917, *Principal*, Wellston High School; Wellston, St. Louis, Missouri.
- 1920 E. GROSS.
1112 East Sixty-fourth Street, Chicago, Illinois.
- 1920 FRANK L. GROVE, A.B.; A.M.
Principal, Mobile High School, Mobile, Alabama.
- 1922 C. C. GROVER.
Superintendent, Winslow, Arizona.
- 1920 L. W. HACKER.
Sheffield, Illinois.
- 1920 R. E. HAINES.
Normal, Illinois.
- 1916 AVON S. HALL, A.B., '84.
1913, *Principal*, Medill High School; Chicago, Illinois.
- 1921 HERBERT F. HANCOX, A.B., '10; A.M., '11.
1919, *Principal*, Central Evening Preparatory School; 19 South La Salle Street, Chicago, Illinois.
- 1919 W. C. HANDLIN.
Lincoln, Illinois.
- 1921 JOHN LOUIS HANEY, B.S., '98; A.M., '00; Ph.D., '01.
1920, *President*, Central High School; Philadelphia, Pennsylvania.
- 1920 BEN M. HANNA.
Rockford, Illinois.
- 1919 C. C. HANNA.
1920, *Principal*, Bridgeport Township High School; Bridgeport, Illinois.
- 1919 L. W. HANNA, Ph.B., '09.
1917, *Principal*, Township High School; Centralia, Illinois.
- 1917 ROY F. HANNUM, A.B., '07.
1919, *Principal*, High School; Ft. Dodge, Iowa.
- 1921 F. E. HANSCOM, M.A.
1897, *Principal*, Gould's Academy; Bethel, Maine.
- 1917 RICHARD T. HARGREAVES, A.B., '02.
Principal, Central High School; Minneapolis, Minnesota.

- 1921 W. E. HARNISH.
Bellflower, Illinois.
- 1920 E. M. HARSHBERGER.
Garrett, Illinois.
- 1920 JOHN C. HART.
Principal, Parrish Street School; Wilkes-Barre, Pennsylvania.
- 1921 CHARLES B. HASKELL, A.B.
1919, *Principal*, High School; South Portland, Maine.
- 1921 CHARLES O. HASKELL.
Harvard, Illinois.
- 1920 L. W. HAVILAND.
Onarga, Illinois.
- 1919 WALTER W. HAVILAND, A.B., '93.
1911, *Principal*, Friends' Select School; Philadelphia, Pennsylvania.
- 1922 WILLIAM F. HEAD, B.S., '09.
1917, *Principal*, High School; Albion, Michigan.
- 1919 BERTRAM A. HEDGES, A.B., '16.
1919, *Superintendent*, La Harpe High School; La Harpe, Illinois.
- 1919 L. C. HEDRICK.
Cropsey, Illinois.
- 1921 AGNES HEIGHTSHOE, M.Di., '03; B.A., '11.
1903, *Principal*, High School; Perry, Iowa.
- 1921 A. G. HEITMAN, A.B., '08.
1920, *Principal*, High School; Sioux City, Iowa.
- 1919 R. B. HENLEY.
Gurnee, Illinois.
- 1921 ELROY W. HEOB.
Neoga, Illinois.
- 1920 A. B. HIETT.
Gardner, Illinois.
- 1921 LUELLA HIGHTSHOE, A.M., '07.
1919, *Principal*, High School; Shenandoah, Iowa.
- 1920 RUTH HILL.
The Gorham Press; Boston, Massachusetts.
- 1917 THOMAS CRAWFORD HILL, A.B., '81.
1904, *Principal*, Christian Fenger High School; Chicago, Illinois.
- 1920 C. M. HIMEL.
Principal, Des Plaines Township High School; Des Plaines, Illinois.
- 1917 A. M. HITCH, A.B., '97; B.S., '07.
1907, *Principal*, Kemper Military School; Boonville, Missouri.
- 1919 FREDERICK ST. J. HITCHCOCK.
1906, *Principal*, New London Vocational High School; New London, Connecticut.

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- 1918 W. W. HOBBS.
North High School; Minneapolis, Minnesota.
- 1920 H. D. HOLDEN.
Manlius, Illinois.
- 1917 WALTER D. HOOD, B.A., '94.
1908, *Principal*, The Gilbert School; Winsted, Connecticut.
- 1921 W. S. HOOVER, B.S.
Principal, Community High School; Clinton, Illinois.
- 1922 FRANCES E. HOPKINS.
Principal, High School; Lyons, Michigan.
- 1920 GEORGE I. HOPKINS, A.B., '85; A.M., '98.
1919, *Headmaster*, High School; Manchester, New Hampshire.
- 1919 B. Q. HOSKINSON, A.B., '16; A.M., '17.
1916, *Superintendent* of Schools; Pinckneyville, Illinois.
- 1919 OTTIS HOSKINSON, A.B., '00; A.M., '16.
1916, *Principal*, Wellington Township High School; Wellington, Illinois.
- 1920 O. C. HOSTETTLER.
Hopedale, Illinois.
- 1919 H. W. HOSTETTLER.
Olney, Illinois.
- 1921 W. LYNN HOUSEMAN.
White Plains, New York.
- 1919 G. E. HOWARD.
1918, *Superintendent*, Farina, Illinois.
- 1921 R. H. HOWELL.
Sullivan, Maine.
- 1919 G. N. HUFFORD.
St. Charles, Illinois.
- 1918 H. D. HUGHES, A.B., '08; A.M., '17.
1917, *Principal*, Hinsdale Township High School; Hinsdale, Illinois.
- 1921 W. HARDIN HUGHES, Ph.B., M.A.
1920, *District Superintendent and Principal*, Claremont Junior-Senior High School; Claremont, Los Angeles County, California.
- 1920 J. W. HUNTER.
Prairie City, Illinois.
- 1920 CLEMENT C. HYDE, A.B., '92; L.H.D., '12.
1911, *Principal*, Hartford Public High School; Hartford, Connecticut.
- 1922 R. W. HYNDMAN, A.B., '15; A.M., '21.
1920, *Principal*, High School; Hillsdale, Michigan.
- 1920 M. E. ILER.
Tremont, Illinois.
- 1920 GUY W. IRELAND.
Kenney, Illinois.

- 1922 RICHARD J. ILSE.
1921, *Superintendent*; Holly, Colorado.
- 1921 WILLIAM B. JACK.
Principal, Portland High School; Portland, Maine.
1920. EURIS JACKSON.
Christopher, Illinois.
- 1921 RALPH W. JACKSON.
Benton, Illinois.
- 1922 DANIEL F. JANTZEN, A.B., '21.
1918, *Principal*, Union High School; Phoenix, Arizona.
- 1921 RICHARD W. JEFFERY.
John Swaney High School; McNabb, Illinois.
- 1922 JOHN H. JESSUP, A.B.
1920, *Principal*, High School; Harlan, Iowa.
- 1918 ARTHUR J. JONES, A.B., '93; Ph.D., '07.
1915, *Professor* of Secondary Education, School of Education, College Hall, University of Pennsylvania; Philadelphia, Pennsylvania.
- 1921 BURTON R. JONES.
Rockwell City, Iowa.
- 1922 GALEN JONES, A.B., '18; A.M., '21.
1921, *Principal*, High School; Le Mars, Iowa.
- 1921 CHARLES A. J. JORDAN.
Hollis, Maine.
- 1921 R. D. KEAN.
Casey, Illinois.
- 1920 ROBERT C. KEICH.
Wauconda, Illinois.
- 1918 PAUL G. W. KELLER, S.B., '01.
1920, *Principal*, Waukegan Township High School; Waukegan, Illinois.
- 1920 O. R. KERLEY.
Willisville, Illinois.
- 1919 GILBERT B. KETCHAM, A.B., 1899.
1912, *Principal*, Missoula County High School; 813 Hilda St., Missoula, Montana.
- 1919 J. KETTERY, A.B., '16.
1919, *Principal*, Township High School; Long View, Illinois.
- 1921 ETHEL J. KEYS.
Mattoon, Illinois.
- 1921 THOMAS M. KILBRIDE.
Virden, Illinois.
- 1921 P. H. KIMBALL.
Principal, Brunswick High School; Brunswick, Maine.
- 1919 C. H. KINGMAN, A.B., '05.
1913, *Principal*, Township High School; Ottawa, Illinois.

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- 1919 G. F. KINZEY.
East Peoria, Illinois.
- 1919 E. R. KIRBY, B.S., '16.
1919, *Principal*, Empire Township High School; Leroy, Illinois.
- 1921 THOMAS J. KIRBY, A.B., '06; M.A., '10; Ph.D., '13.
1920, *Professor* of Secondary Education, University of Iowa; Iowa City, Iowa.
- 1918 H. H. KIRKPATRICK.
Principal, High School; West Chicago, Illinois.
- 1920 GERALD W. KIRN, Ph.B., '09; M.A., '13.
1919, *Principal*, High School; Council Bluffs, Iowa.
- 1920 C. O. KLONTZ.
Camp Point, Illinois.
- 1922 D. G. KNAPP.
Rogers, Michigan.
- 1919 H. E. KNARR.
Annawan, Illinois.
- 1921 CHARLES E. KNECHLER.
Loda, Illinois.
- 1921 J. D. KNIGHT.
Lyndon, Illinois.
- 1920 CHARLES W. KNUDSON.
Eureka, Illinois.
- 1921 OSCAR F. KOCH, Ph.B.
1921, *Principal*, High School; Kewanee, Illinois.
- 1922 MATHILDA KREBS.
1917, *Principal*, Westmont-Upper Yoder High School; Johnstown, Pennsylvania.
- 1919 EARL L. KOEHLER, B.S., '17.
1919, *Principal*, Geneva High School; Geneva, Illinois.
- 1918 G. J. KOONS, A.B., '12.
1918, *Superintendent of Schools*, *Principal* of Township High School; 922 North Chicago St., Pontiac, Illinois.
- 1920 LEONARD V. KOOS, A.B., '07; A.M., '15; Ph.D., '16.
1919, *Professor* of Secondary Education, University of Minnesota; Minneapolis, Minnesota.
- 1919 RICHARD E. KRUG.
1903, *Principal*, North Division High School; Milwaukee, Wisconsin.
- 1919 W. W. KRUMSIEK, A.B., '13.
1919, *Principal*, Shelbyville High School; Shelbyville, Illinois.
- 1922 H. W. KUEHNER.
Stephenson, Michigan.
- 1921 R. J. KYGER.
Alvin, Illinois.

- 1920 ROBERT L. LADD.
Green Valley, Illinois.
- 1917 D. LANGE, A.B., '09.
1916, *Principal*, Mechanic Arts High School; Central &
Robert Sts., St. Paul, Minnesota.
- 1921 C. E. LARSON.
Stronghurst, Illinois.
- 1918 ARNOLD LAU, LL.B., '06; Ph.B., '18.
1918, *Principal*, High School; Rock Island, Illinois.
- 1921 C. E. LAUTERBACH, A.B., '11.
Principal, High School; Fairfield, Iowa.
- 1922 L. W. LAWRENCE.
Reed City, Michigan.
- 1920 H. W. LEACH, B.S., '11.
1917, *Principal*, Marietta High School; Marietta, Ohio.
- 1918 J. R. E. LEE, B.A., '89; A.M., '94.
1915, *Principal*, Lincoln High School; Nineteenth Street &
Tracy Ave., Kansas City, Missouri.
- 1922 CHARLES E. LE FURGE.
Lansing, Michigan.
- 1921 R. W. LEIGHTON.
Principal, Skowhegan High School; Skowhegan, Maine.
- 1919 J. E. LEMON, A.B., '83.
1894, *Superintendent of Schools*; Blue Island, Illinois.
- 1922 GEORGE F. LEONARD, B.S., '05; A.B., '14.
1921, *Principal*, High School; Crawfordsville, Indiana.
- 1922 MARTHA M. LETTS, A.B.
1903, *Principal*, High School; Sedalia, Missouri.
- 1916 WILLIAM D. LEWIS, A.B., '92; A.M., '95; Ph.D., '17.
1919, *Deputy Superintendent of Public Instruction*; Harris-
burg, Pennsylvania.
- 1921 ERNEST M. LIBBY.
Principal, High School; Presque Isle, Maine.
- 1921 EARL K. LIGHTCAP.
Stockton, Illinois.
- 1920 R. V. LINDSEY, B.E., '19.
Principal, Township High School; Milford, Illinois.
- 1921 W. H. LIVERS.
1921, *Principal*, High School; Galesburg, Illinois.
- 1920 A. V. LOCKHART, A.B., '15; A.M., '17.
1920, *Superintendent*; Sheldon, Illinois.
- 1922 ROBERT F. LOHRIE,
Principal, High School; New Richmond, Wisconsin.
- 1919 E. H. LOMBER, Ph.B., '03; Ph.M., '06.
1906, *Principal*, Canandaigua Academy; Canandaigua, New
York.

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- 1918 A. K. LOOMIS, A.B., '09; A.M., '17.
Wellington High School; Wellington, Kansas.
- 1922 G. E. LOOMIS, A.B.
1920, *Principal*, Central High School; Big Rapids, Michigan.
- 1916 HIRAM B. LOOMIS, A.B., '85; Ph.D., '90.
1905, *Principal*, Hyde Park High School; 6218 South Rock-
well St., Chicago, Illinois.
- 1921 O. E. LOOMIS.
1921, *Principal*, High School; Ashland, Illinois.
- 1920 FLOYD LORDS.
Brimfield, Illinois.
- 1919 LILLIAN S. LOTTINVILLE.
Kempton, Illinois.
- 1919 O. H. LOWARY, A.B., '02.
1910, *Principal*, High School; 207 W. South St., Painesville,
Ohio.
- 1920 W. R. LOWERY.
Hoopeston, Illinois.
- 1919 W. M. LOY.
Fisher, Illinois.
- 1922 A. C. LUCHTMAN.
Alma, Michigan.
- 1921 A. J. LUDDEN.
Principal, High School; Bakersfield, California.
- 1921 HUGH W. LUNDY, B.A., '15.
1918, *Principal*, High School; Albia, Iowa.
- 1916 EDMUND D. LYON, A. B., '02; Ped. D., '08.
1919, *Principal*, East High School; 5505 Arnsby Place, Cin-
cinnati, Ohio.
- 1921 MARY A. LYMAN.
Shelbyville, Illinois.
- 1922 S. H. LYTTLE, A.B., '15.
1920, *Principal*, High School; Manistee, Michigan.
- 1917 DAVID MACKENZIE, A.B., A.M.
1904, *Principal*, Central High School; Detroit, Michigan.
- 1919 H. MACKENZIE.
Genoa, Illinois.
- 1920 L. W. MACKINNON, A.B., '99; A.M., '05.
1919, *Principal*, Central High School; 123 South Forge St.,
Akron, Ohio.
- 1919 T. S. MACQUIDDY, B.S., '03.
1907, High School *Principal and Superintendent*, Watsonville
School District, 320 Palm Ave., Watsonville, California.
- 1920 D. A. MAGRUDER.
Westville, Illinois.
- 1919 L. B. MANN.
Earlville, Illinois.

- 1922 L. B. MANN.
Eastern High School; Detroit, Michigan.
- 1922 MARTIN M. MANSPERGER, B. Sc. in Ed.
1921, *Principal*, High School; Barnesville, Ohio.
- 1921 J. O. MARBURY.
1921, *Principal*, High School; Rockford, Illinois.
- 1921 EDNA M. MARCUM, B.A., '12.
1918, *Principal*, High School; Rolfe, Iowa.
- 1921 FRANK H. MARKHAM.
Jerseyville, Illinois.
- 1919 FRED L. MARSHALL.
Saunemin, Illinois.
- 1916 GEORGE EDWARD MARSHALL, A.B., '86.
1908, *Principal*, Davenport High School; Davenport, Iowa.
- 1916 J. E. MARSHALL, B.S., '01; M.A., '19.
1916, *Principal*, Central High School; 1696 Blair St., St. Paul, Minnesota.
- 1920 RUSSELL C. MARSHALL, A.B.
1919, *Superintendent*, Phillips University; Prague, Oklahoma.
- 1920 E. W. MARTIN.
Mt. Carmel, Illinois.
- 1916 J. G. MASTERS, Ph.B., '12; A.M., '15.
1915, *Principal*, Central High School; Twentieth & Dodge Sts., Omaha, Nebraska.
- 1920 A. R. MATHENEY.
Bismark, Illinois.
- 1922 ARTHUR MATTESON.
Bessemer, Michigan.
- 1918 E. O. MAY, B.S., '11.
1921, *Principal*, Township High School; Robinson, Illinois.
- 1921 E. C. NEGGUIER.
Oxford, Maine.
- 1920 E. B. MELL.
Athens, Georgia.
- 1921 A. B. MELROSE, A.B., '15.
1919, *Principal*, High School; Madrid, Iowa.
- 1921 CHARLES E. MELTON.
Walnut, Illinois.
- 1920 MONROE MELTON.
1920, *Principal*, Hall Township High School; Spring Valley, Illinois.
- 1919 A. W. MERRILL, A.B., '90.
1918, *Principal*, North High School; Des Moines, Iowa.
- 1916 ARMAND R. MILLER, B.S., '97.
1914, *Principal*, McKinley High School; St. Louis, Missouri.
- 1919 E. F. MILLER, Ph.B., Ph.M.
1911, *Principal*, Rayen High School; Youngstown, Ohio.

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- 1916 EDWIN L. MILLER, A.B., '90; A.M., '91.
1922, *Director of Languages*, Board of Education; Detroit, Michigan.
- 1916 FRED J. MILLER, A.B., '05.
1913, *Principal*, East High School; 205 Independence Ave., Waterloo, Iowa.
- 1922 H. L. MILLER.
Principal, Wisconsin High School, and *Professor of Education*, University of Wisconsin; Madison, Wisconsin.
- 1918 H. P. MILLER.
1893, *Principal*, High School; Atlantic City, New Jersey.
- 1922 C. L. MILTON.
St. Joseph, Michigan.
- 1920 FRED C. MITCHELL, B.S., '00; M.A., '06.
1915, *Principal*, Classical High School; Lynn, Massachusetts.
- 1920 OSCAR V. MONGERSON, B.S., '18.
1921, *Superintendent*; Richmond, Illinois.
- 1920 C. S. MONTTOOTH.
Pleasant Plains, Illinois.
- 1920 GEORGE ORSON MOORE, A.B., '04; A.M., '09.
1919, *Principal*, Central High School; Erie, Pennsylvania.
- 1921 WALTER P. MORGAN.
Macomb, Illinois.
- 1921 ELSIE MORRISON.
Mt. Carroll, Illinois.
- 1916 FRANK L. MORSE, A.B., '86; A.M., '89.
1908, *Principal*, Harrison Technical High School; 2850 Twenty-fourth St., Chicago, Illinois.
- 1919 FRANK PURINTON MORSE, A.B., '90; A.M., '01.
1901, *Principal*, Revere High School; 8 Victoria St., Revere, Massachusetts.
- 1921 FRED H. MOULTON.
Principal, High School; Wytopotlock, Maine.
- 1921 L. E. MOULTON.
Principal, Edward Little High School; Auburn, Maine.
- 1920 EDGAR R. MULLINS, A.B., LL.B.
1921, *Principal*, Community High School; Tolono, Illinois.
- 1921 G. P. MULVANEY.
St. Viator College; Bourbonnais, Illinois.
- 1920 IRVING MUNSON.
Momence, Illinois.
- 1920 SANFORD MURPHY.
Chillicothe, Illinois.
- 1920 JESSIE MUSE.
1912, *Principal*, Girls' High School; Atlanta, Georgia.
- 1919 PERRY W. MCALLISTER, A.B.
1918, *Principal*, Township High School; Lovington, Illinois.

- 1921 MARIE BELLE McCABE.
Abingdon, Illinois.
- 1920 T. B. McCARTAN.
Alma, Illinois.
- 1920 J. K. McCARTER.
Arcola, Illinois.
- 1916 E. H. KEMPER McCOMB, A.B., '95; A.M., '98.
1916, *Principal*, Emmerich Manual Training High School;
South Meridian and Merrill Sts., Indianapolis, Indiana.
- 1917 THOMAS J. McCORMACK, A.B., '84; A.M., '87; LL.B., '90; M.S., '19.
1903, *Principal*, LaSalle-Peru Township High School; Fifth
and Chartres Sts., LaSalle, Illinois.
- 1920 C. C. McCORMICK.
Bardolph, Illinois.
- 1916 JOSEPH STEWART McCOWAN, Ph.B., '95; A.M., '00.
1916, *Principal*, High School; South Bend, Indiana.
- 1921 THOMAS E. McCUE.
Arrowsmith, Illinois.
- 1916 M. R. McDANIEL, M.S., '05; A.M., '09.
1914, *Principal*, Oak Park and River Forest Township High
School; 741 N. Oak Park Ave., Oak Park, Illinois.
- 1920 S. K. McDOWELL, B.Sc., '09.
1920, *Superintendent of Schools*; Bloomington, Illinois.
- 1918 (MRS.) N. C. McKINNEY, A.B., '03.
1918, *Principal*, Camargo High School; Camargo, Illinois.
- 1919 J. C. McMILLAN.
Mazon, Illinois.
- 1919 J. H. McNEEL, A.B., '00.
1913, *Principal*, High School; 217 St. Lawrence Ave., Beloit,
Wisconsin.
- 1921 O. L. McREYNOLDS.
Atkinson, Illinois.
- 1919 W. E. McVEY, B.S., '16; A.M., '19.
1919, *Principal*, Thornton Township High School; Harvey,
Illinois.
- 1922 J. B. NELSON.
1921, *Principal*, High School; Batavia, Illinois.
- 1921 C. H. NEWCOMER, B.S., '16.
1920, *Principal*, High School; Oskaloosa, Iowa.
- 1920 N. NEWSUM.
Staunton, Illinois.
- 1919 ELMER S. NEWTON, A.B., '95; M.D., '05.
1915, *Principal*, Western High School; Washington, D. C.
- 1919 D. F. NICKOLS.
Lincoln, Illinois.
- 1922 S. S. NISBET.
Principal, High School; Fremont, Michigan.

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- 1919 O. F. NIXON, A.B., '14.
1921, *Principal*, East High School; Green Bay, Wisconsin.
- 1919 (MRS.) LUCIE M. NORRIS, A.B., '91.
1918, *Principal*, High School; Saugus, Massachusetts.
- 1921 PAUL C. NORVELL, B.S.
1920, *Principal*, High School; Cairo, Illinois.
- 1918 FRANCIS R. NORTH, A.B., '97; A.M., '03.
1915, *Principal*, Paterson High School; Paterson, New Jersey.
- 1916 E. P. NUTTING, A.B., '02.
1905, *Principal*, Moline High School; 1840 Fourteenth Ave., Moline, Illinois.
- 1919 A. EDGAR NYE, B.S., '06.
1919, *Principal*, Township High School; Coal City, Illinois.
- 1919 E. E. OBERHOLTZER, A.B., '10; A.M., '15.
1913, *Superintendent of Schools*; Tulsa, Oklahoma.
- 1920 S. R. OLDHAM, A.B., '08; A.M., '19.
1920, *Principal*, Norwood High School; Norwood, Massachusetts.
- 1917 F. H. OLNEY, A.B., '91.
1893, *Principal*, Lawrence High School; 815 Indiana St., Lawrence, Kansas.
- 1921 G. A. OMANS.
Onaway, Michigan.
- 1922 L. R. OMANS.
Principal, Junior High School; Ypsilanti, Michigan.
- 1922 A. B. O'NEIL.
Principal, High School; Oshkosh, Wisconsin.
- 1918 F. L. ORTH, A.B., '00.
1917, *Principal*, High School; New Castle, Pennsylvania.
- 1921 L. G. OSBORN.
Wood River, Illinois.
- 1919 RAYMOND W. OSBORNE, B.A., '06; M.A., '08.
Associate in Administration, F. W. Parker School; Chicago, Illinois.
- 1922 GRACE A. OVERHEISER.
Centerville, Michigan.
- 1919 IRVING O. PALMER, A.B., '87; A.M., '90.
1910, *Principal*, Newton Technical High School; 30 Highland Ave., Newtonville, Massachusetts.
- 1916 L. S. PARMELEE, B.S., '00.
1913, *Principal*, High School; Corner Beach and Third Sts., Flint, Michigan.
- 1921 ALBERT PARKER.
Norway, Maine.
- 1920 B. F. PARR.
Carterville, Illinois.

- 1920 J. C. PARSONS.
Hebron, Illinois.
- 1921 JOHN A. PARTRIDGE.
Sanford, Maine.
- 1921 DELLA PATTON, B.A., '12.
1920, *Principal*, High School; Washington, Iowa.
- 1921 D. S. PEACOCK.
Oakland, Maine.
- 1920 LEO L. PECK.
Milton, Illinois.
- 1919 EMILY C. PENNOCK.
Carthage Academy; Carthage, Illinois.
- 1921 EVERETT V. PERKINS.
Principal, Houlton High School; Houlton, Maine.
- 1921 M. B. PERKINS.
Abbott School; Farmington, Maine.
- 1917 CHARLES H. PERRINE, Ph.B., '92.
1920, *Principal*, Parker High School; Chicago, Illinois.
- 1920 R. R. PERRINE.
Canton, Illinois.
- 1921 ESTHER M. PERRY.
Middleville, Michigan.
- 1921 O. E. PETERSON.
Sycamore, Illinois.
- 1920 A. F. PETTY.
Waverly, Illinois.
- 1921 LILLIAN B. PHELPS.
Golconda, Illinois.
- 1920 GEORGE C. PHIPPS.
Manito, Illinois.
- 1917 FRANK G. PICKELL, '09; A.M., '17.
1920, *Assistant Superintendent of Schools*, Cleveland, Ohio.
- 1921 F. H. PIERCE.
Principal, Jordan High School; Lewiston, Maine.
- 1920 GEORGE L. PLIMPTON.
1896, *Principal*, Tilton Seminary; Tilton, New Hampshire.
- 1921 JOHN G. POLLARD.
Pittsfield, Illinois.
- 1922 H. J. PONITZ.
Principal, High School; Allegan, Michigan.
- 1921 EDITH L. PORTER, Ph.B., '15.
1919, *Principal*, High School; Maxwell, Iowa.
- 1917 JOHN L. G. POTTORF, A.B., '03; M.E., '11; M.A., '11.
1907, *Principal*, McKinley High School; Canton, Ohio; 702
Thirteenth St., N. W., Canton, Ohio.

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- 1917 JOHN RUSH POWELL, B.A., '97; M.A., '99.
1909, *Principal*, Soldan High School; 918 Union Blvd., St. Louis, Missouri.
- 1919 E. W. POWERS.
1912, *Superintendent of Schools, Principal*, Township High School; Fairbury, Illinois.
- 1919 WILLIAM PRAKKEN, A.B., '98; Ph.B., '00.
1915, *Principal*, High School; 128 Glendale Ave., Highland Park, Wayne Co., Michigan.
- 1921 W. A. PRATT.
Atwood, Illinois.
- 1919 RALPH W. PRINGLE.
Principal, High School; Illinois Normal University, Normal, Illinois.
- 1921 G. A. PROCK.
Principal, Kennebunkport High School; Kennebunkport, Maine.
- 1921 CLARENCE W. PROCTOR.
1920, *Principal*, High School; Bangor, Maine.
- 1916 MERLE PRUNTY, A.B., '09.
1918, *Principal*, Central High School; Tulsa, Oklahoma.
- 1920 C. O. PRYOR.
Fisher, Illinois.
- 1921 MYRTLE PULLEN, B.A., '10.
1919, *Principal*, High School; Britt, Iowa.
- 1921 CLARENCE P. QUIMBY.
Principal, Cony High School; Augusta, Maine.
- 1919 JAMES RAE, B.S., '03.
1918, *Principal*, High School and Junior College; Mason City, Iowa.
- 1919 L. W. RAGLAND.
Casey, Illinois.
- 1919 J. E. RAIBOURN, A.B., '96.
1916, *Principal*, Township High School; Eldorado, Illinois.
- 1922 R. L. RAKESTRAW.
Hart, Michigan.
- 1920 O. C. RAMSEYER.
Princeton, Illinois.
- 1919 F. O. RANDALL, M.Di., '97; A.M., '16.
1916, *Principal*, Flathead County High School; 704 Second Ave., W., Kalispell, Montana.
- 1918 A. A. REA, A.B., '13.
1917, *Principal*, West High School; 84 Blackhawk St., Aurora, Illinois.
- 1920 C. H. REAM, A.B., '11; M.A., '17.
1920, *Superintendent*; 405 North Fourth, Clear Lake, Iowa.

- 1921 W. C. REAVIS, A.M.
1921, *Principal*, University High School; University of Chicago, Chicago, Illinois.
- 1916 ERNEST JOHN REED, A.B., '15.
1916, *Principal*, Adrian High School; 425 E. Front St., Adrian, Michigan.
- 1921 H. S. REED.
Presque Isle, Maine.
- 1918 JOSEPH A. REED, B.S., '06; A.M., '07.
1906, *Principal*, Franklin High School; Seattle, Washington.
- 1920 Q. RAY REEDY.
Hamilton, Illinois.
- 1920 B. L. REEVES.
Vermont, Illinois.
- 1922 CECIL K. REIFF, A.B., '15; A.M., '17.
1921, *Principal*, Central High School; Muskogee, Oklahoma.
- 1922 O. M. RHINE.
Principal, High School; Manhattan, Kansas.
- 1917 CLARENCE T. RICE, A.B., B.Sc., '11; A.M., '18.
Principal, Kansas City High School; Kansas City, Kansas.
- 1918 B. C. RICHARDSON, A.B., '93; A.M., '96.
1906, *Principal*, Theodore Roosevelt High School; 524 E. Seventh St., Alton, Illinois.
- 1922 S. H. RIDER.
Principal, High School; Wichita Falls, Texas.
- 1922 WILFRED HARVEY RINGER, A.B.
1921, *Principal*, High School; Gloucester, Massachusetts.
- 1921 H. A. RITCHER.
Piper City, Illinois.
- 1921 B. J. RIVETT, S.B.
1920, *Principal*, Northwestern High School; Detroit, Michigan.
- 1919 WILL C. ROBB, A.B., '14; A.M., '15.
1920, *Principal*, Part-Time School, J. Sterling Morton High School; Cicero, Illinois.
- 1916 GEORGE H. ROCKWOOD, A.B., '79; A.M., '82.
1900, *Principal*, Austin High School; 5417 Fulton St., Chicago, Illinois.
- 1920 P. H. RODGERS.
Thawville, Illinois.
- 1917 WILLIAM S. ROE.
Principal, High School; Colorado Springs, Colorado.
- 1921 IDA C. ROHLF, B.A., '15.
1920, *Principal*, High School; Aurelia, Iowa.
- 1922 ELIZABETH ROONEY.
Principal, Monmouth Park School; 2802 Dodge Street, Omaha, Nebraska.

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- 1921 CAMERON M. ROSS, B.A., '15.
1920, *Principal*, High School; 833 Elm Street, Webster City,
Iowa.
- 1922 JOHN RUFI.
L. L. Wright High School; Ironwood, Michigan.
- 1918 J. B. RUSSELL.
Wheaton, Illinois.
- 1921 W. L. RUTHERFORD, B.A.
1920, *Superintendent*; St. Helena, Oregon.
- 1916 EDWARD RYNEARSON, A.B., '93; A.M., '96; Ph.D., '19.
1912, *Principal*, Fifth Avenue High School; 1800 Fifth Ave.,
Pittsburgh, Pennsylvania.
- 1922 JEAN SAFLEY.
Guthrie Center, Iowa.
- 1920 R. M. SALEE.
Bowen, Illinois.
- 1916 R. L. SANDWICK, A.B., '95.
1903, *Principal*, Deerfield-Shields Township High School;
Highland Park, Illinois.
- 1922 EDWARD SAUVAIN, Ph.B.
1919, *Principal*, Schenley High School; Pittsburgh, Pennsyl-
vania.
- 1920 W. O. SAYLER.
Iroquois, Illinois.
- 1921 R. A. SCHEER.
Atlanta, Illinois.
- 1920 J. P. SCHEID.
Roanoke, Illinois.
- 1921 HERBERT SCHISLER.
St. Bededol Academy; Peru, Illinois.
- 1920 O. I. SCHMAELZE.
Tuscola, Illinois.
- 1919 H. GALEN SCHMIDT, A.B., '02; B.S., '07; A.M., '10.
1915, *Principal*, Township High School; Belleville, Illinois.
- 1918 PARKE SCHOCH, A.B., '88; A.M., '91.
1912, *Principal*, West Philadelphia High School for Girls;
Forty-seventh & Walnut Sts., Philadelphia, Pennsyl-
vania.
- 1920 A. G. SCHROEDERMIER.
Walnut, Illinois.
- 1920 E. M. SCHUENEMAN.
Nashville, Illinois.
- 1920 E. F. SCHWEICKART.
Fremont, Illinois.
- 1921 O. M. SEARLES.
La Grange, Illinois.

- 1920 JOHN L. SEATON.
150 Fifth Avenue, New York City.
- 1920 PAUL SECHANSEN.
Mt. Olive, Illinois.
- 1919 AVA M. SEEDORFF.
Sheldon, Illinois.
- 1916 WALTER E. SEVERANCE, A.B., '95; A.M., '02.
1918, *Principal*, Central High School; Harrisburg, Pennsylvania.
- 1920 B. F. SHAFER.
Jacksonville, Illinois.
- 1922 J. P. SHAND.
Hudson, Michigan.
- 1922 B. C. SHANKLAND.
Principal, High School; Cadillac, Michigan.
- 1919 GEORGE P. SHANLEY, A.B., '04; A.M., '06.
1918, *Principal*, St. Ignatius High School; 1076 Roosevelt Road, W., Chicago, Illinois.
- 1921 CHARLES SHAW.
Gorham, Maine.
- 1920 HOMER P. SHEPHERD.
1921, *Principal*, High School; Lincoln, Nebraska.
- 1919 J. W. SHIDELER, Ph.B., '09.
1918, *Principal*, Crawford County High School; Cherokee, Kansas.
- 1916 DAVID P. SIMPSON, A.B., '92; A.M., '95; LL.B., '09.
1911, *Principal*, West High School; Cleveland, Ohio.
- 1922 M. R. SIMPSON, A.B.
1920, *Principal*, High School; Bucyrus, Ohio.
- 1920 AVERY W. SKINNER, A.B., '92.
1920, *Director* of Examinations and Inspections Division; Albany, New York.
- 1919 LOUIS PALMER SLADE, A.B., '93; A.M., '97.
1913, *Principal*, Public High School; New Britain, Connecticut.
- 1922 CHARLES H. SLATER, Ph.B.
1921, *Principal*, Cleveland, Ohio.
- 1920 CLYDE SLONE.
Virden, Illinois.
- 1921 ELMER O. SMALL.
Principal, High School; Newport, Maine.
- 1919 C. M. SMITH.
Effingham, Illinois.
- 1920 CARL W. SMITH.
Pleasant Hill, Illinois.
- 1920 CHARLES W. SMITH.
Winchester, Illinois.

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- 1920 H. H. SMITH.
Savanna, Illinois.
- 1919 L. C. SMITH, A.B., '05.
1918, *Principal*, Community High School; Chenoa, Illinois.
- 1916 LEWIS WILBUR SMITH, A.B., '02; A.M., '13; Ph.D., '19.
1919, *Principal*, Joliet Township High School and Junior College; Joliet, Illinois.
- 1920 ROBERT G. SMITH.
Whitehall, Illinois.
- 1921 R. H. G. SMITH.
Rushville, Illinois.
- 1921 V. T. SMITH.
Lexington, Illinois.
- 1919 MORTON SNYDER.
1921, Park School; Liberty Heights Avenue, Baltimore, Maryland.
- 1916 WILLIAM H. SNYDER, A.B., '85; A.M., '88; D.Sc., '08.
1908, *Principal*, Hollywood High School; 1521 Highland Ave., Los Angeles, California.
- 1919 W. L. SPENCER, B.A., '02; M.A., '15.
1920, *Supervisor* of Secondary Education; Montgomery, Alabama.
- 1921 C. E. SPICER.
Assistant Principal, Joliet Township High School and Junior College; Joliet, Illinois.
- 1921 M. H. SPICER.
Washington, Illinois.
- 1921 H. CARL SPITLER.
Petoskey, Michigan.
- 1921 ASA SPRINGER, A.B., '14.
1920, *Assistant Principal*, High School; Decatur, Illinois.
- 1916 W. R. SPURRIER, A.B., '01.
1912, *Principal*, Princeton Township High School; 1013 So. Church St., Princeton, Illinois.
- 1919 W. M. STACY.
Shirley, Illinois.
- 1919 FRANK W. STAHL, Ph.B.
1918, *Principal*, Bowen High School; Chicago, Illinois.
- 1920 FLORENCE M. STAINES, B.A., '11.
1917, *Principal*, High School; Eldora, Iowa.
- 1920 RAYMOND E. STALEY, A.B., '12.
1920, *Principal*, Beall High School; Frostburg, Maryland.
- 1920 F. N. STARK.
Perry, Illinois.
- 1918 WAYLAND E. STEARNS, A.B., '85; A.M., '94.
1899, *Principal*, Barringer High School; Sixth Ave., Ridge & Parker Sts., Newark, New Jersey.

- 1916 H. T. STEEPER, A.B., '09.
1918, *Principal*, West High School; Des Moines, Iowa.
- 1919 E. G. STEVENS, B.Ed., '16.
1917, *Principal*, Township High School; *Superintendent*,
Rantoul, Illinois.
- 1920 E. R. STEVENS, B.S., '18.
1920, *Principal*, High School; Leavenworth, Kansas.
- 1916 FRED G. STEVENSON, A.B., '08.
1917, *Principal*, High School; 1564 Iowa St., Dubuque, Iowa.
- 1919 JOHN L. STEWART, B.Sc., '13.
1918, *Principal*, Parkersburg High School; 1713 Latrobe
Street, Parkersburg, West Virginia.
- 1920 BENNETT M. STIGALL, A.B., '01; A.M., '05.
1919, *Assistant Superintendent of Schools*; 3729 Walnut
Street, Kansas City, Missouri.
- 1920 WILLIAM EARLE STILWELL, A.B., '01; A.M., '03.
1903, *Headmaster*, University School; Cincinnati, Ohio.
- 1922 WILLIAM R. STOCKING, A.B., A.M.
1921, *Associate Principal*, Central High School; Detroit,
Michigan.
- 1920 K. G. STOUFFER.
Elgin, Illinois.
- 1921 J. B. STOUT.
Shabbona, Illinois.
- 1921 RALPH E. STRINGER.
Herrin, Illinois.
- 1920 E. H. STULKENS.
Sullivan, Illinois.
- 1919 J. G. STULL.
Du Quoin, Illinois.
- 1921 ARTHUR L. STURTEVANT, B.S.
1921, *Principal*, High School; Brownville Junction, Maine.
- 1921 L. C. STURTEVANT.
Ellsworth, Maine.
- 1919 WALTER C. SUFT, Ph.B.
1916, *Principal*, Township High School; Pawnee, Illinois.
- 1921 W. E. SULLIVAN.
Principal, High School; Brewer, Maine.
- 1921 W. P. SULLIVAN.
Illioopolis, Illinois.
- 1919 O. M. SWANK.
Anna, Illinois.
- 1921 CLARA P. SWAIN, B.A.
1917, *Principal*, High School; 308 East Main Street, Vermil-
ion, South Dakota.
- 1921 HAROLD B. SWICKER, B.A.
1921, *Principal*, High School; Richmond, Maine.

- 1920 I. D. TAUBENECK, B.Ed.
1919, *Superintendent of Schools, Principal*, Community High School; Minier, Illinois.
- 1922 W. H. TEDROW.
River Rouge, Michigan.
- 1921 W. P. THACKER.
Nokomis, Illinois.
- 1916 J. L. THALMAN, A.B., '00; A.M., '10.
1917, *Principal*, Proviso Township High School; 128 Keystone Avenue, River Forest, Illinois.
- 1921 HAZEL V. THOMAS, B.Di., '11; A.B., '15.
1920, *Principal*, High School; Belmond, Iowa.
- 1921 JAMES E. THOMAS.
Principal, Dorchester High School; Boston, Massachusetts.
- 1921 L. F. THOMAS, A.B., '14.
1920, *Principal*, High School; Vinton, Iowa.
- 1920 M. SMITH THOMAS.
1919, *Principal*, Hutchinson Central High School; Buffalo, New York.
- 1920 FRANK E. THOMPSON, A.B., '71; A.M., '75; Ed.D., '19.
1890, *Headmaster*, Rogers High School; 15 Champlin Street, Newport, Rhode Island.
- 1921 G. H. THOMPSON.
Marissa, Illinois.
- 1921 HELEN J. THOMPSON, A.B., '11.
1918, *Principal*, High School; 208 West Girard Avenue, Indianola, Iowa.
- 1919 WILLIS THOMSON, A.B., '18.
1919, *Principal*, High School; Woodstock, Illinois.
- 1921 C. H. THRELKELD.
1921, *Principal*, High School; Marshalltown, Iowa.
- 1921 HAROLD I. TICE.
Rankin, Illinois.
- 1921 CHARLES C. TILLINGHAST, A.B., '06; A.M., '17.
1920, *Principal*, Horace Mann School for Boys; 11 West 246th Street, New York City.
- 1921 THOMAS TOOKER.
Freeport, Maine.
- 1921 T. C. TOOKER.
Principal, High School; Millbridge, Maine.
- 1922 HOMER C. TOOTHMAN, B.A., '13.
1920, *Principal*, West Monongah High School; Monongah, West Virginia.
- 1921 E. D. TOWLER.
La Grande, Oregon.
- 1920 LEW R. TRAYLOR.
Fillmore, Illinois.

- 1919 O. G. TREADWAY, Ph.B.
1919, *Superintendent*, Community High School; McHenry, Illinois.
- 1921 W. E. TREBILCOCK, B.A., '08; M.A., '09.
1920, *Principal*, High School; Ishpeming, Michigan.
- 1919 ELOISE R. TREMAIN, B.A., '04.
1918, *Principal*, Ferry Hall; Lake Forest, Illinois.
- 1917 GEORGE N. TREMPER, A.B., '01.
1911, *Principal*, High School; 726 S. Exchange St., Kenosha, Wisconsin.
- 1919 H. D. TRIMBLE, A.B., '10; A.M., '19.
1920, *Assistant High School Visitor*, University of Illinois; Urbana, Illinois.
- 1919 J. H. TRINKLE, B.S., '04; A.B., '11.
1911, *Principal*, Township High School; Newman, Illinois.
- 1921 H. H. TRUFANT.
Principal, Parsonfield Seminary; Parsonfield, Maine.
- 1919 ESTON V. TUBBS, A.B., '09; A.M., '10.
1919, *Principal*, New Trier Township High School; Kenilworth, Illinois.
- 1922 C. C. TUCK.
Principal, High School; Owosso, Michigan.
- 1921 B. X. TUCKER, B.S., '00; A.B., '01; M.S., '03.
1907, *Principal*, Union High School; Richmond, California.
- 1921 IDA C. TURNBULL.
Mattoon, Illinois.
- 1921 C. D. TURNER.
South Paris, Maine.
- 1917 L. T. TURPIN.
1921, *Principal*, Washington Senior High School; Cedar Rapids, Iowa.
- 1922 WILLIAM URBAN.
1909, *Principal*, High School; Sheboygan, Wisconsin.
- 1919 M. S. VANCE.
Oblong, Illinois.
- 1920 FRANCIS VANDER VEEN.
Salem, Illinois.
- 1922 M. W. VAN PUTTEN.
1919, *Principal*, High School; Mason, Michigan.
- 1920 SAMUEL S. VERNON, B.S.
1920, *Principal*, High School; Downers Grove, Illinois.
- 1919 COSMOS C. VESELEY.
St. Procopius Academy; Lisle, Illinois.
- 1921 H. S. VOORHEES.
Principal, High and Manual Training School; Fort Wayne, Indiana.

- 1921 E. E. WACASER.
Chadwick, Illinois.
- 1916 CLIFFORD GILBERT WADE, B.S., '96; M.A., '15.
1913, *Principal*, Superior High School; 793 W. Fourth St.,
Superior, Wisconsin.
- 1920 J. E. WAKELEY.
Danville, Illinois.
- 1920 H. L. WALKER.
Rockton, Illinois.
- 1917 KARL DOUGLAS WALDO, A.B., '06; A.M., '14.
1914, *Principal*, East High School; 24 Hickory Ave., Aurora,
Illinois.
- 1920 W. D. WALDRIP, A.B., '03.
1916, *Principal*, Streator Township High School; Streator,
Illinois.
- 1919 ALBERT WALKER.
Arthur, Illinois.
- 1920 J. B. WALLACE.
Rock Falls, Illinois.
- 1920 CHARLES BURTON WALSH, A.B., '06.
1918, *Principal*, Friends' Central School; Philadelphia,
Pennsylvania.
- 1920 E. D. WALTERS.
Ipava, Illinois.
- 1920 J. A. B. WALTHER.
Golconda, Illinois.
- 1918 GEORGE A. WALTON, A.B., '04; A.M., '07.
1912, *Principal*, George School; George School, Pennsylvania.
- 1922 R. W. WARD.
Principal, High School; Mt. Clemens, Michigan.
- 1920 H. E. WARFEL.
Zeigler, Illinois.
- 1921 WORCESTER WARREN, A.B., '12.
1919, *Vice-Principal*, East High School; Des Moines, Iowa.
- 1922 EDNA W. WATKINS.
Milford, Michigan.
- 1918 P. M. WATSON, A.B., '14; A.M., '19.
1912, *Principal*, George School; George School, Pennsylvania.
Cross St., Robinson, Illinois.
- 1918 HERBERT S. WEAVER.
Principal, High School of Practical Arts; Boston, Massa-
chusetts.
- 1922 CARRIE G. WEBB.
Clarion, Iowa.
- 1919 MAUD WEBSTER, B.S., '05.
1910, *Principal*, Township High School; Sandwich, Illinois.

- 1921 N. H. WEEKS, B.A., '94.
1920, *Vice-Principal*, West High School; Des Moines, Iowa.
- 1916 DAVID E. WEGLEIN, A.B., '97; A.M., '12; Ph.D., '16.
1916, *Associate* in Education, Johns Hopkins University;
1921, *Assistant Superintendent* of Public Schools, Baltimore, Maryland.
- 1919 GEORGE B. WEISIGER.
Oakwood, Illinois.
- 1921 E. K. WELCH.
Fryeburg Academy; Fryeburg, Maine.
- 1920 M. C. WELCH.
Gillespie, Illinois.
- 1917 J. F. WELLEMAYER, A.B., '06; M.A., '14.
1917, *Principal*, Senior High School; 1208 Jersey Street, Quincy, Illinois.
- 1916 DORA WELLS, B.A., '84; M.A., '98.
1911, *Principal*, Lucy L. Flower Technical High School; 6059 Wabash Ave., Chicago, Illinois.
- 1921 L. J. WEST.
Bar Harbor, Maine.
- 1921 JAMES H. WESTFALL.
Norrie City High School; Grayville, Illinois.
- 1922 ELIZABETH WETMORE.
Boyne City, Michigan.
- 1917 WM. A. WETZEL, A.B., '91; Ph.D., '95.
1901, *Principal*, High School; 12 Belmont Circle, Trenton, New Jersey.
- 1921 W. H. WHEELER.
Kankakee, Illinois.
- 1921 F. U. WHITE.
Galva, Illinois.
- 1917 C. W. WHITTEN, A.B., '06.
1916, *Principal*, De Kalb Township High School; 324 Sycamore Road, De Kalb, Illinois.
- 1916 WILLIAM WIENER, A.B., '88; A.M., '89; Ph.B., '91.
1912, *Principal*, Central Commercial & Manual Training High School, Newark, New Jersey.
- 1920 JOSEPH A. WIGGIN, A.B., '09.
1916, *Headmaster*, Richards High School; Newport, New Hampshire.
- 1922 GUILFORD M. WILEY.
1921, *Principal*, High School; La Crosse, Wisconsin.
- 1920 H. A. WILK, A.B., '20.
1920, *Assistant Principal*, Community High School; Momence, Illinois.
- 1919 M. P. WILKINS.
Roseville, Illinois.

- 1920 GLENNA M. WILKINS.
Mahomet, Illinois.
- 1916 GILBERT H. WILKINSON, Ph.B., '98; A.M., '07.
1913, *Principal*, Lyons Township High School; Brainard Ave., La Grange, Illinois.
- 1919 H. D. WILLARD.
1919, *Superintendent*, Plainfield, Illinois.
- 1916 G. W. WILLETT, A.B., '08; A.M., '14.
1914, *Principal*, Hibbing Six Year H. S. & Junior College; Hibbing, Minnesota.
- 1920 FRANK L. WILLIAMS, A.B., '89; A.M., '07.
1908, Summer High School; St. Louis, Missouri.
- 1920 J. C. WILLIAMS.
Arlington Heights, Illinois.
- 1919 R. J. WILLIAMS.
Danvers, Illinois.
- 1920 M. H. WILLING.
1920, *Principal*, High School; Springfield, Illinois.
- 1921 URBAN G. WILLIS, A.B., '00; A.M., '10.
1919, *Principal*, The Pullman Free School of Manual Training; 250 East 111th Street, Chicago.
- 1921 CLINTON D. WILSON.
Principal, Morse High School; Bath, Maine.
- 1920 EDWARD C. WILSON, B.S., '91; A.M., '20.
1903, *Principal*, Friends School; Baltimore, Maryland.
- 1919 F. A. WILSON.
1919, *Principal*, Community High School; West Frankfort, Illinois.
- 1920 H. A. WILSON.
Hurst, Illinois.
- 1918 MRS. LUCY L. W. WILSON, Ph.D., '97.
1916, *Principal*, South Philadelphia High School for Girls; 2101 S. Broad St., Philadelphia, Pennsylvania.
- 1921 WILLIAM E. WING.
Principal, Deering High School; Portland, Maine.
- 1920 (MRS.) A. T. WISE.
Principal, Commercial High School; Atlanta, Georgia.
- 1916 JOHN E. WITMER, A.B., '94.
1918, *Principal*, City High School; 407 So. Poplar Ave., Kankakee, Illinois.
1921. I. E. WOLD.
Crystal Lake, Illinois.
- 1922 ASA H. WOOD.
St. Louis, Michigan.
- 1921 E. R. WOODBURY.
Thornton Academy; Saco, Maine.

- 1921 I. M. WRIGLEY.
Mt. Pulaski, Illinois.
- 1921 W. P. WYATT.
Riverside, Illinois.
- 1921 C. E. WYGANT, B.S., '12.
1920, *Principal*, High School; Ames, Iowa.
- 1921 C. W. YERKER.
Sandoval, Illinois.
- 1916 LEONARD YOUNG, A.B., '98.
1910, *Principal*, Central High School; Lake Ave. and Second
St., Duluth, Minnesota.
- 1918 ROSS NEWMAN YOUNG, A.B., '12.
1916, *Principal*, High School; 1018 South Second Street,
Stillwater, Minnesota.
- 1921 W. J. YOURD, B.A., '10.
1917, *Principal*, High School; 602 Fourth Avenue, Clinton,
Iowa.
- 1921 RALPH L. ZEHNER.
Effingham, Illinois.
- 1921 A. H. ZOOK, LL.B., '13.
1921, *Principal*, High School; Wellington, Kansas.

National Association of Secondary-School Principals

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SIXTH ANNUAL MEETING OF THE ASSOCIATION

The sixth annual meeting of the National Association of Secondary-School Principals was held in Chicago, Illinois, Monday, Tuesday, Wednesday, and Thursday, February 27 and 28, and March 1, and 2, 1922.

FIRST SESSION

The first session, held in the Red Room of Hotel La Salle, Monday, February 27, 1922, was called to order at 2:00 P. M. by the President, Principal Merle Prunty of Central High School, Tulsa, Oklahoma. The President read his address on *Sane and Systematic Direction of Extra-Curricular Activities*.

THE PRESIDENT'S ADDRESS SANE AND SYSTEMATIC DIRECTION OF EXTRA-CURRICULAR ACTIVITIES

PRINCIPAL MERLE PRUNTY,

CENTRAL HIGH SCHOOL, TULSA, OKLAHOMA

One of the most insistent administrative problems clamoring for appropriate and comprehensive direction is that of our extra-curricular activities. The country-wide expansion of this new type of school procedure is paralleled only by the present unprecedented demand for secondary education itself. The alert administrator generally is prone, in part, to gauge his success and the esprit de corps of his organization by the interest in and the scope of his extra-curricular activities.

All too frequently, however, the persistent desire for membership and participation in extra-curricular organizations has had no directive recognition. In fact, had we been sufficiently aware of the broad and ultimate objectives of secondary education, I seriously question whether the term *extra-curricular* activities would have found its way into our educational vocabulary. Had we really recognized the socializing and motivating influences of such organizations, we would have hastened to

utilize these same principles of student participation in all class room procedure that are so appealing in the extra-curricular activities. Had we fully comprehended the opportunities which a broad program of extra-curricular activities affords for developing diversified and balanced leadership—the crying need of American Democracy—we would have extended to these activities definite administrative direction by including such organizations as the school newspaper, school yearbook, debating, orchestra, band, glee clubs, athletic teams, dramatics, public speaking, student council, etc., as activity periods within the daily program of all students.

In reality, the ultimate promotion and effective functioning of every extra-curricular activity rests upon the instructional leadership and guidance of a thoroughly trained faculty member who has a socialized viewpoint and who can cause students to acquire the fundamental techniques necessary for creative and successful performance. I believe, therefore, that it is our duty to make extra-curricular activities curricular activities by democratizing preparatory courses thereto as elective requirements within the students' regularly scheduled program of recitations.

To do this, it may be necessary to modify somewhat the school schedule. I have found five daily seventy-five minute periods and a home room period of twenty minutes satisfactory. In this organization every student may elect a period of recreation daily and a second period of vocational, laboratory, or extra-curricular work. Such a program permits each student taking each semester some one or more of the extra-curricular activities within his curriculum. A student naturally elects first the rudimentary course for each activity, and continues with the succeeding course therein if the finding course proves sufficiently attractive to him. (A typical schedule was in the hands of all present and attention was called specifically to the operation of the extra-curricular plan. See schedule below.)

By making extra-curricular activities curricular, we tend rather definitely, I think, to nullify the reaction coming from our conservative and purely academically inclined teachers and patrons who maintain that students' attention and energies are so diverted thereby that their interest and enthusiasm for history, mathematics, language, science, etc., is considerably minimized. To overcome this objection and still to preserve the manifestly obvious advantages of extra-cur-

ricular participation, we in Tulsa decided upon the organization which I have shown you in the schedule. Such an arrangement practically eliminates all after school and night meetings of our organization, save the purely social functions which are always held on week ends and which are, I might add, supervised according to the appended regulations.

Furthermore, in attempting to answer fairly the conservatives, we have initiated a three-fold study involving: First, the scholarship record of students participating and not participating in extra-curricular activities; second, the number of extra-curricular activities carried by each student; and, third, the intelligence quotient of participating and non-participating students. (Here statistics were presented, showing the results of the study thus far, which were to the effect that controlled extra-curricular participation does not lower scholarship, but rather stimulates the students to improve their scholarship records.) We require that every student making a public appearance shall meet the state requirements for all students in interscholastic contests. Likewise, he must meet a social acceptability test. If his conduct has been such as to reflect discredit on the school and if he is one who is prone to violate the school's regulations and is frequently under discipline, he is dropped from a public appearance, though it be immediately before a performance. Our groups are always large enough so that students are continually in competition for their respective parts. However, the number of offices held by any individual pupil is limited through Senate regulation as shown in the appended statement.

Even in a curricular program of extra-curricular activities we not only limit the number of elective and appointive offices but require at least six semester grades for the previous year of 80% or above and no failures. The outstanding advantages of this regulation are: First, it democratizes responsibility; second, it automatically protects the students' scholarship; third, it appropriately evaluates scholastic achievement. We do not limit the number of activities in which a student may participate so long as he meets the controls.

Again, if we are to foster a balanced program of extra-curricular activities, we must not only give adequate social recognition and publicity to all participants, but we must likewise provide adequate finance for all of the varied activities. In our organization every student who personally competes in interscholastic contests,

either as an individual or as a member of an organization, is awarded a seven-inch academic T if the contest be academic and a seven-inch block T if the contest be physical. All students awarded a T are automatically members of the T Club and are entitled while undergraduates to free admission to the activities in which they won the T. Upon graduating each student having won a T is given a T Club life certificate entitling him to free admission to all activities of all kinds held under the auspices of Tulsa High School. The pictures of contesting groups and individuals are given equal prominence in the school newspaper, an attempt always being made to emphasize work *en masse*. (Here copies of school paper were used to show mass athletics, debating, dramatics, music, home room work, etc.)

As a means of support, we have adopted the appended co-operative plan, known as a gross receipts tax. We adopted this plan because some activities, making rich contributions to the school procedure, are, from their very nature, financially non-productive.

In closing, I wish to summarize the fundamental objectives and principles which I believe should control us in the direction of extra-curricular activities.

First, provide a graduated comprehensive curricular program of extra-curricular activities.

Second, give administrative direction to these activities in the selection of skilled leadership.

Third, establish suitable controls providing for appropriate participation and adequate social recognition.

ADMINISTRATIVE CONTROLS INFLUENCING STUDENT PARTICIPATION IN EXTRA CURRICULAR ACTIVITIES

SCHOLARSHIP INCENTIVES

Adopted in 1920 by the Student Control Senate and the Faculty Committee on Scholarship.

SPECIAL SCHOLARSHIP HONORS

All school six weeks and semester scholarship recognition:

1. No grade below E-.
2. Not more than one grade below E- and that a G.
3. No grade below G.
4. Honorable mention—not more than one grade below G and that a G-.

Physical training and music grades are not counted toward scholarship honors.

SCHOLARSHIP REQUIREMENTS FOR EXTRA-CURRICULAR PARTICIPATION

Scholarship requirement for any public appearance or interscholastic participation is the same as the requirement of the State Athletic Association and State Interscholastic meet.

Scholarship requirement for participation in senior play:

1. Graduation requirements met.
2. Not more than two grades below G- for first twelve weeks of the second semester of senior year, exclusive of physical training and music.
3. No grades below P-.

Scholarship requirement for holding any elective or appointive school office:

1. Up to class standing required by the organization.
 2. Must have six grades G- or above for the previous year, exclusive of physical training and music. No grades below P-.
-

GRADUATION SCHOLARSHIP HONORS

Seniors—All graduation requirements met.

1. Very high scholarship—24 credits E- or E at close of first semester senior year. No grades below G-.

2. High scholarship—18 credits E- or E at close of first semester senior year, provided that work of candidates for graduation scholarship honors at close of twelve weeks of second semester shows same high quality as the preceding semesters. No grades below P-.

3. Honorable mention for scholarship—14 credits E- or E at end of seventh semester and same quality of work first twelve weeks of last semester as during seven previous semesters. No one having a failure above freshman year will be considered for honorable mention.

4. Graduation students winning very high and high scholarship honors shall be awarded silver scholarship medals in a special assembly held in their honor. All students receiving scholarship honors shall have the privilege of wearing a white carnation at the commencement functions. Names of all graduates winning scholarship honors shall be starred on commencement programs.

5. Students from other high schools may become candidates for graduation scholarship honors provided their scholarship records

show the same high quality in Tulsa Central High School as that presented from other high schools. A student to be considered for graduation honors, however, must have been a member of the Tulsa High School for at least one year.

6. Physical training and music grades are not counted toward scholarship honors.

REGULATION GOVERNING SOCIAL LIFE

Adopted by the Joint Social Committee of Representative students and teachers, March 30, 1920. Approved by the Student Control Senate.

1. All parties held under the auspices of the high school shall be held at the Tulsa High School building.

2. No organization may have more than two night parties a semester, exclusive of day-time hikes, day-time parties, matinees programs, etc.

3. No one is to be admitted to any party, picnic, hike, or matinee party who is not at the time of such function a member of the present student body and a member of the organization giving the social function.

4. All organization functions shall be chaperoned by at least two faculty sponsors and two parents, except that class functions shall have at least four faculty sponsors and at least four parents.

5. All social functions shall be held on week end nights, or preceding a vacation period if held in middle of the week, and shall begin not later than eight o'clock and close at 10:30. At class parties a class sponsor will be at the door to check the entrants as students. No admittance will be granted after 8:15. No students may leave a party before closing time except they be excused by a class sponsor.

6. Refreshments at all functions are to be made very simple and inexpensive. Stress is to be placed on the entertainment, decorations, and activities of the evening rather than on refreshments. Thirty-five cents shall be the maximum assessment on the individual students attending.

7. In planning entertainments, equal thought and consideration are to be extended to all who may attend.

8. If dancing is permitted, correct positions, censored by the sponsors and parents, teachers and students, are absolutely required, the aim being to develop a type of dancing that shall be unique for

the high school in grace, beauty, and modesty rather than modelled after the ordinary ball room procedure.

9. The music for dancing shall be approved by the music committee of the faculty and the organization. It shall consist of one-steps, two-steps, and waltzes.

10. Students are expected to dress simply for their own social functions.

11. At any given function each organization member must remember that it is his organization's function and that it is his social obligation to see that the organization members are provided means of attending.

12. Democratic participation is expected from all present.

13. Failure on the part of any student to comply absolutely with the spirit of these regulations shall be at the option of the sponsors' committee or the principal result in temporary or permanent suspension from all social functions of the school.

LIMITATIONS UPON ELECTIVE OR APPOINTIVE OFFICES

Adopted by the Student Control Senate April 21, 1917.

A. Students may hold:

1. Two major offices; or,
2. Four minor offices; or,
3. One major and two minor offices.

B. Students meeting regular school requirements for membership and participation in the school activities may enter any or all interscholastic competitions and may join any or all school organizations.

C. Major offices:

1. Presidents of classes and of all officially recognized organizations.
2. All senators (considered as major offices only).
3. All representatives.
4. Secretary of senior class.
5. Head cheer (yell) leader.

D. Minor offices:

1. All offices not enumerated as major offices.

SOCIAL ACCEPTABILITY TEST

The list of all students making public appearance is submitted to the faculty for approval. If a student's conduct has been such as to reflect discredit upon his school; if he is prone to neglect his school's or his organization's requirements and regulations; if he is frequently under discipline, he may be dropped from a public appearance role, even though it be immediately before a performance. This may be done without seriously affecting the procedure, in as much as groups of students are continually in competition for the respective parts.

CO-OPERATIVE PLAN OF FINANCING SCHOOL ACTIVITIES

Plan adopted by the Student Control Senate and Faculty

Gross Receipts Tax deposited to the following High School accounts:

Athletics	3% to Literary
	5% to Music
Gross Receipts.....	3% to Awards
	2% to Art
	2% to Academic
	5% to Music
	3% to Literary
	2% to H. E. Department
Pageants	2% to Art
Class Plays.....	2% to Stage Craft
Gross Receipts	2% to Manual Training
	2% to Academic
	3% to Awards
	3% to Awards
	3% to Literary
Music Events	2% to H. E.
Gross Receipts.....	2% to Manual Training
	2% to Art
	2% to Stage Craft
	2% to Academic
	2% to H. E.
	2% to Manual Training
	2% to Art
*Dramatics Club Events.....	2% to Stage Craft
	2% to Academic
	5% to Music

*Deposit Net Receipts with Literary Account.

PRINCIPAL CECIL K. REIFF, CENTRAL HIGH SCHOOL, MUSKOGEE, OKLAHOMA, read his paper, *The Modern High-School Principal's Opportunity and Obligation as a Salesman.*

THE MODERN HIGH-SCHOOL PRINCIPAL'S OPPORTUNITY AND OBLIGATION AS A SALESMAN

PRINCIPAL CECIL K. REIFF,

CENTRAL HIGH SCHOOL, TULSA, OKLAHOMA

The modern high-school principal's opportunities for salesmanship are as limitless and as comprehensive as his obligations are sacred and binding. The destiny of our social, political, and economic life depends upon an intelligent, sympathetic understanding between the entire citizenship and the educational personnel of our nation. As far as secondary education is concerned, it devolves upon the high-school principal, as organizer of this great distributing agency, to interpret the aims, policies, and possibilities of the school to his community.

School is a business. The tax payer is the buyer of a necessary commodity. He has a right to know that his returns are commensurate with his investment. We, as administrators, therefore, are duty bound to render to the public not only a concise program for the organization, but a report which shows that the school produces the best results obtainable under existing conditions.

In order that we may understand the basic obligation of the principal as a salesman, it is necessary for us to look into the general nature of a sale. A sale is consummated only when the purchaser is satisfied that he has received sufficient value in service or commodity for the money he has expended. School men may be making the serious mistake of following the theory that the sale is complete when the money and goods are exchanged over the counter. We cannot conclude that our sale is complete when the public has provided satisfactory building and instructional facilities. Citizens, in general, believe in secondary education. They buy it. They are willing to pay the price in hopeful anticipation of receiving a just return. But the sale is not complete until the purchaser is satisfied. Is it a fact that patrons, teachers, and students are satisfied with the results of the modern high school? Do they fully believe in the present possibilities of our sole commodity, secondary education? Do they also believe that our institution is distributing its commodity in the best possible manner? Are they willing to come again and buy more and more of the same commodity at even an increasing price? If so, there will be no question about sufficient salaries, adequate buildings, and increased public favor.

So long as we are a nation of sixth graders and millions of people can neither read nor write; so long as only fifteen per cent of our primary pupils graduate from high school; so long as we are compelled to force children into secondary schools and to plead with parents to visit schools; so long as some mothers and fathers care more about picture shows, lodges, and clubs than about the institution which moulds the lives of their children; so long as any community is so self-satisfied to assume that its high school is as good or a bit better than any other without some scientific reason for such belief; so long as contractors, without the guidance of expert educational advisers, are permitted by the authorities to draw up final plans for high-school buildings; so long as the high-school education is not the paramount demand; just so long will it be imperative for the high-school principal to continue actively as the head salesman in this gigantic organization.

The business of managing the modern high school demands leadership; it demands a superior knowledge of modern secondary-school problems; it demands a broad vision of school needs and of democratized procedure; it demands a well founded policy of enlightened management which pierces the problems of the future. Possessing these essentials, the administrator must be able to convert others to his program. He must not only be familiar with his school but he must know and understand the personalities with whom he has to deal. Failing in the latter, he fails in all. In other words, the modern high-school principal must be able to use the principles of salesmanship intelligently. Otherwise, it will be incumbent upon him to produce results without the assistance of his associates.

The high-school principal is obliged first to sell himself on his own program and on the basic values of secondary education. Never can our high schools rise above the level of their principals. Low indeed is this level when many enter the profession only as a stepping stone to some other work. The administrator of secondary education must be converted to and have an undying faith in his profession. He must be an evangelist for education and an ambassador to those with whom he comes in contact.

In the second place, the teachers with the principal, should be familiar with the best, modern movements in education. They should strive to give to the public a favorable impression of the schools. Many good ideas have been wrecked by an uninformed, unsympathetic teaching corps. Replies received from fifty principals in the

United States show that secondary-school teachers are very cooperative and, as a whole, are sold on the educational idea. Several principals, however, expressed regret at the inertia of teachers to rise to the possibilities of their profession. It is essential that the principal and teachers be confident of their ability, as well as believe in the value of the product that they have to offer. Numerous and varied forms of co-operative management, such as teachers' councils, advisory committees, and administrative boards, are indicative of the fact that the best results can be obtained only through harmonious relations between principal and teachers. We are obliged to conclude that many apparent maladjustments are merely results of the non-use of salesmanship on the part of the promoter of some otherwise excellent administrative program.

Again, the teachers and principal are obliged to sell secondary education and local school usages to their students and to all prospective students. While every obligation is in itself an opportunity, this one seems most important of all. It is one of our best opportunities to increase the character of service by securing the highest enrollment and retentive efficiency possible. It is almost criminal for us to withhold the value of secondary education when so many worthless ideals are placed before young people. As evidence of an awakened interest in this phase of selling education, I point to such agencies as educational and vocational guidance, worth while assemblies, students' conferences, student government organizations, publicity campaigns, and many others. Students, themselves, in our modern high school, with its socialized recitation and co-operative administration, have come to regard the high school as their own. They like to think of themselves as citizens of a student community and, as such, will be important factors in bringing their fellows and friends into the school. With this feeling existing within our student body, it seems an opportune time to wage an active and aggressive warfare against incompetency and gross ignorance. Let us emphasize the positive values of education. Students should know that an education will give them the ability to accomplish tasks; that it will give them an appreciation of the rights of others; and that it will give them the love of art, literature, and true citizenship so necessary in our national life.

As a fourth point, we must interest the public in the school. People will be interested in our school only as it affects them, their family, and their friends. We should invite all activities which have

a salutary effect upon our school or which will stimulate any public opinion favorable to educational improvement. The principal and teachers must become integral parts of the social and the political life of the community so that they may at all times inform the public concerning the status of the school's undertakings. It is a very significant fact that chambers of commerce have combined in a campaign to acquaint the citizen tax payer with the public schools in order to secure "intelligent and adequate support for the program of improvement."

Again, one of our most binding obligations lies in our opportunity to recruit our own profession. How many of us have ever seriously talked to our senior students in order to persuade them to enter the teaching profession? It seems to me that we should think enough of our own profession to recommend it to any young man or young woman aspiring to enter a life of service. School administration not only presents a satisfactory return in money, but offers one of the highest opportunities for service in our social life.

The person to whom we sell education to-day, acts as a carrier of an idea and creates a contagion of educational ideas and ideals. No one knows how far it will go. We are, therefore, all salesmen of secondary education. We have a good commodity. It is a necessity. It is for us to create an atmosphere and crystallize the potential wants into demands.

PRINCIPAL GEORGE N. TREMPER, HIGH SCHOOL, KENOSHA, WISCONSIN, read his paper on *Constructive Supervision of High-School Instruction*.

CONSTRUCTIVE SUPERVISION OF HIGH SCHOOL INSTRUCTION

PRINCIPAL GEORGE N. TREMPER,
HIGH SCHOOL, KENOSHA, WISCONSIN

Much has been said and much written on the subject of supervision of instruction. In every discussion of the subject the undoubted assumption has been that the supervision was constructive. Nothing new can be expected of a ten-minute paper on the subject, naturally, unless the discussion can stimulate more discussion or discover a different point of view. It is only with this hope in mind that one could have the temerity to attempt any presentation of ten-minute duration.

Discussions on supervision regularly have in my mind a supervisory officer whose official duties are limited to one thing, namely, to observe, criticise, and direct a certain performance with the one purpose of making that performance as scientific and effective as possible, and I believe these discussions are developed rather from the standpoint of *creating* teaching methods than of *developing* and *correcting* teaching methods. I have in mind the situation as it presents itself in the academic instruction and practice teaching in the normal school and teachers' college.

But I assume under the circumstances that our topic has in mind the high-school principal with his supervisory and teaching force. This obviously gives us a different array of conditions and a quite different point of view. Certainly the principal's supervisory duties are not limited to the classroom performance of the teaching force. That may be, and probably is a prime duty. But you do not need to be told that conditions force other duties upon him. Indeed, they are almost legion. However, I question whether the word *instruction* in our topic is intended to be limited in this discussion to mere classroom performance. I believe it is not, and right here is the second factor in our interpretation which furnishes us a different point of view.

When we think of high-school instruction the classroom is only one of the many items that come to mind. Our thought is rather of that larger grouping of educational factors and agencies which combine to form the instructional fabric of the school. The supervisory duties of the high-school principal, then, with the trained and experienced teaching force, while less scientific, perhaps, are more complex and more real. And instruction is not a mere classroom performance, but a highly organized combination of factors out of which training is to come. There are the curriculum, the practical appurtenances through which the curriculum may be made to function, and the moral and intellectual atmosphere and pervading spirit of sympathy and co-operation and high purpose without which there can be but little intellectual growth. It is from this point of view that this discussion is to proceed.

A prime duty, then, is to provide a curriculum which is organized with the definite purpose of meeting the characteristic educational needs of the community. A curriculum of that sort is not hit or miss, nor is it necessarily highly academic, but it does carry with it an atmosphere of contact with human *realities*, and helps every

member of the teaching force to understand the place that his work has in the scheme. Every subject in the curriculum must have a definite reason for being there. Through a study of the conditions and interests of the community one can determine the relative number and amount of various types of subjects which ought to find a place in his scheme to make the scheme fit best into the community, and it is only through a careful analysis of the situation and an adequate understanding of educational values that this can be done.

To be sure traditional prejudices and college entrance requirements and similar factors will not be without their influences. But in a strongly industrial community, for instance, where metal working mills and automobile factories and knitting works and tanneries determine local interests we shall teach chemistry with a considerable amount of emphasis on practical chemical tests of metals and fabrics. Physics will give extra attention to tensile strength, resistance, tempering, and conductivity of metals, details of storage batteries, electrical apparatus and wireless. Emphasis upon such things is inevitable because local interests are most concerned with them.

A predominating element in the population of a more or less illiterate class of people will perhaps furnish the school with a student body which is lacking in an adequate understanding of the fundamentals of good English. In those circumstances one may be forced to give more than usual attention to the elements of grammar and composition. Short stories and current literature may serve better than the classics to develop a healthy interest. The strongly geographical and commercial content of the available material in Spanish may prove more attractive and stimulating than French with its traditional fiction. It is the business of the principal to observe these facts and make suitable use of them. He must know the best way to develop these subjects under the conditions and must provide teachers capable of presenting them according to the demands of the situation.

The next step is to provide proper conditions in which to work out these subjects. Knowing what function each subject has in the grouping, one will know how to proceed intelligently to provide the equipment necessary to assure the desired results. The matter of apparatus and supplies will demand not a little attention, and its variety and amount must be determined by a very careful consideration of the needs. The members of the teaching force may hinder rather than help. The effect in such matters of dominant personali-

ties is well known to all of you. The most exacting sort of supervisory control is often required of the principal to give all interests uniform consideration.

From this point of view the problem may take on startling proportions. But the least one can do is to break into it and avail himself of such solutions as present themselves. One must take his teachers entirely into his confidence, make plain his purposes and how he hopes to accomplish them. Be optimistic and enthusiastic. Encourage co-operation. Be patient and appreciative of honest effort. Be satisfied with even slow progress if only the effort is positive. Be a leader. Do things and expect things to be done. Leaders will develop in the force. Use them. Give them freedom and authority and encourage them to expect results. It is surprising to know how little direction these people need. Expect only what is humanly possible for teachers and pupils and insist upon getting it.

And after all, while supervision involves the direction of many other instructional factors, it must give generous attention to class room performance. Indeed, it is for this thing primarily that the whole school organization is created. One can not, of course, teach without a curriculum and a proper equipment and environmental conditions. The teaching will be more or less worth while according to the intelligence and purposefulness with which the curriculum is chosen and correlated. But unless one expects teaching to result in definite outcomes any attempt to construct a curriculum and provide proper teaching conditions will be scarcely worth the effort. When one is reasonably certain that the curriculum is judiciously planned, and that it must, if properly handled, secure definite and desirable results, then methods of presentation must be devised, proper materials provided, time limitations and points of emphasis determined, and teachers definitely instructed in these matters. I am not persuaded that it is the duty of the high-school principal to help teachers make lesson plans. It is not economy of time, money, nor effort for him to attempt to train teachers in the mere rudiments of teaching. Of course, there is such a thing as training teachers in service and it is a highly important factor in the development of efficient teachers. But that means assisting teachers to apply effectively in service the educational principles in which they have had proper instruction in schools provided for that purpose. One should not forget that the controlling factor in the whole situation is the matter of motivation. In my estimation motivation is not properly a matter of

incidentals, but rather one of bigness of purpose. It is difficult sometimes for teachers to comprehend this. But persistent and sympathetic effort will generally beget an understanding. Not all nor even a majority of teachers are working merely for the salary they get. If they were, their good sense would drive them from the profession. On the whole they are reasonably well fitted temperamentally and idealistically to do the thing they are doing. Otherwise they quit.

There are probably many matters involved in building up and maintaining a constructive program of instruction in high schools which have not been even hinted at in this paper. But one cannot doubt the effectiveness of serious, sympathetic leadership which comprehends all problems and all situations and strives day by day in earnest and persistent endeavor to inspire all to painstaking effort and co-operation, in order that the finest achievement may be reached.

MR. FRANK G. PICKELL, SUPERVISOR OF JUNIOR HIGH SCHOOLS, CLEVELAND, OHIO, discussed Mr. Tremper's paper:

We have heard a great deal during the last few years about constructive supervision. The need of it has been discussed over and over again. We all recognize the need, but fail in the organization of supervision and getting the work done. In many cases the principal has too narrow a view of what constitutes supervision. His supervision begins and ends with class room visitation. He has no far reaching program for the growth and substantial development of his teachers. Too often supervision takes second place or is left to chance. At any rate the work is not done.

The purpose of constructive supervision is perfectly clear. What constitutes constructive supervision and how to organize it are not so clear. Constructive supervision has broad aspects and must be organized upon the basic principle that teachers in service improve their work by active and constant study of their problems,—particularly the problems of content and method. Direct criticism of class room work is a very small and relatively unimportant part of constructive supervision. To grow the teacher must study and what is more important, must have a desire to study. Self satisfied teachers will not long remain efficient. They soon petrify. Supervision, therefore, must be so organized and administered that this student attitude, the desire for improvement on the teachers' part, are the direct results.

What then, constitutes constructive supervision and how may it be accomplished?

Faculty co-operation in curriculum planning.

The organization of the curricula offers one of the very best means available to secure professional study of the right kind. Teachers spend too little time in the study of the materials of instruction and their organization for economy in teaching. But to secure the benefit that teachers may derive from this work, the responsibility for the organization of curricula must be thrown upon them. The principal must not think he is making us of the ability of his teachers if he establishes all the governing principles and then submits them for faculty criticism. A committee system will probably be found the most satisfactory plan of securing co-operation. A committee can be assigned to formulate the principles of organization; another to determine the constants and electives; another the specific curricula and requirements; another sequence and pupil guidance and so on. Such a plan will make the faculty fully conscious of the larger problems of secondary education and of the place which any particular subject has in the general scheme.

Courses of study.

If teachers should co-operate in curriculum planning they should all the more co-operate in preparing courses of study. What to teach and how it should be organized are just as important as method. Our schools are overcrowded with content. We have not studied the relative worth of the materials of instruction. Everything is included and too much of the philosophy of the woman who said she did not see how science could be taught to small children because they could not understand atoms and molecules, prevails in the preparation of courses of study. This whole problem should be made a matter of study on the part of teachers. We talk of economy of time. The essential work of the elementary school could probably be done in one to two years less than now are given to it. While elimination of non-essentials and economical organization would enable us to finish the work of the junior and senior high school and the junior college in the six years now devoted to secondary education. Take first year algebra for example. We teach so many topics that the pupil knows little or nothing about any of them at the end of the course. Instead of fixing the few fundamental operations needed in the later study of mathematics, we must indulge in the extravagance of teaching all the known possibilities in factoring, in digit problems, in work problems, in simultaneous equations of several unknowns, and in the most

highly complex fractions imaginable. We cannot go on forever expanding the public school and running up the cost. It is no longer a problem of how much we can get into courses of study, but of paring them down to the bone and organizing the material so that it may be taught economically. This field offers tremendous possibilities for continuous co-operative study on the part of the principal and the faculty.

The study and selection of text books.

Standards should be established for the selection of texts, one of which should be the course of study. Their selections ought to follow rather than precede the preparation of courses of study. In this way the text will be supplementary to the course rather than the determining factor in its organization. The book should be measured in terms of the aims of the course of study, the organization of its material, the eliminations necessary and its general teachability. The study of text books should be made one of the parts of the program of supervision.

The diagnostic analysis and study of pupil achievement.

This work strikes at the very heart of efficiency in teaching. The analysis of pupil achievement ought not to be made merely for the sake of statistics, or of finding out what the pupils' scores are, but of discovering the reasons for the scores made. Too many studies stop with the facts obtained and the preparation of tables. Diagnostic analysis should lead to close observation of just what the pupil needs most at any particular time, the adaptation of the course of study to his ability and the method that will be most effective. Further check up will reveal the effectiveness of the remedies applied. Achievement tests used as indicated here will make it possible to improve the quality of teaching. Their use makes comparison possible and certainly paves the way for experimental teaching.

Experimental teaching.

Experimental teaching is one of the most economical means we have of making substantial progress in the organization of content material and in trying out new methods. Experiment by outstanding teachers is much safer and more economical than the wholesale adoption of some new idea. The socialized recitation is going on the rocks, largely because it became the fashion to socialize before it became the fashion to train teachers how to socialize. The project method is likely to go the same way and the pity of it is that the good

in both of these so-called methods is likely to be discarded along with the bad. Wise experiment on a limited scale by teachers qualified could have saved us a great deal of confusion and in many cases actual loss in efficiency. Experiment in content and method is another valuable means of constructive supervision, if the results are made available to all the teachers.

The organization of the faculty for professional study.

If the original premise of this discussion holds good, constructive supervision will include a definite plan for professional study. The ability to organize and maintain a program of professional study is one mark of the competent principal. Again the faculty must share the responsibility. The committee system is an efficient means of accomplishing the end. The faculty meeting can also be an important means. Too often the faculty meeting degenerates into a discussion of mere administrative devices and details. It can be made a meeting similar to the class hour for the discussion of problems of method. The measured results of experimental teaching, the discussions of changes in methods, new types of teaching and all the professional work of the faculty can be cleared through the faculty meeting. Such meetings should be planned as carefully as any other part of the principal's work.

Class room visitation, the supervision of the teacher's technique.

Mere inspection of class room work is not supervision and yet nearly all class room visitation is inspectorial. Relatively, teachers can be rated very quickly and with considerable accuracy, but rating alone is not supervision. To supervise effectively the principal must become familiar with the teacher's work. Supervision means helping the teacher to bring out the best that is in her. Teachers know that most so-called class room supervision is so superficial that she resents the judgment passed upon her. She resents it because she thinks it unfair and rightly claims that such supervision is too largely a matter of opinion. At best criticism is likely to be taken as a personal matter and class room visitation should be extensive enough that clear cut evidence may supplant the necessity of offering too much straight-from-the-shoulder advice. Visitation will enable the principal to diagnose the case and suggest rather than dictate the policy for improvement.

Throughout this discussion the point has been emphasized that self study and a professional attitude on the part of teachers are the

most important factors in supervision. To be sure there are times when the short cut method of "do and don't" must be used but that does not constitute in any sense of the word a program of looking to the substantial improvement of teachers in service.

Thus it is clear that constructive supervision has broad aspects and should be organized as carefully as administrative duties. The ideal is an improvement in the work of all teachers and supervision that degenerates into casual visits, mere inspection, fault finding or excessive flattery, in no sense measures up to that ideal.

The objection will at once be offered that this program will require much more time than the average principal can give to the work. It probably will require more time than he can give to it under present conditions, but that is not a valid objection. He should be given the time and necessary assistance. But with ever so much time and ample help he will not do the real job of constructive supervision of instruction, or even see that it is done, unless in his mind the work takes rank second in importance to no other of his many duties and responsibilities.

PRINCIPAL ARMAND MILLER, OF MCKINLEY HIGH SCHOOL, ST. LOUIS, MISSOURI, distributed outlines and then read his paper on *Team Work in the Management of a Large High School*.

TEAM WORK IN THE MANAGEMENT OF A LARGE HIGH SCHOOL

PRINCIPAL ARMAND R. MILLER

MCKINLEY HIGH SCHOOL, ST. LOUIS, MISSOURI

The modern high school has become so complex that it is absolutely impossible for the principal of a school of one thousand or more pupils to attend personally to all matters that are extraneous to the actual class room teaching. Even with an assistant principal and ample clerical help, he may (and in many cases does) become so absorbed with details that he is completely submerged and the poor school sails along like a ship without a rudder.

The principal needs time and energy for the supervision of instruction and for planning policies and improvements. He must be able to see the school in all of its phases as an educational unit. This is highly important because the individual teachers are naturally more

or less engrossed in the subjects they are teaching and in which they have specialized, and for this reason do not commonly have the proper perspective on the school in its larger workings.

But there are other reasons why responsibilities should be shared. In the first place, the principal has no monopoly in the matter of brains and ability, and a strictly "one man school" is not likely to be so wisely managed as a "team work school." Then, too, teachers are developed and broadened by participating in the solving of problems that are outside of the four walls of their class rooms, and are thus trained for administrative positions. Still more important—since the school exists solely for the pupil—the students' initiative, self-control, and sense of responsibility are developed if they too are given a share in the management. Last, but not least, the plan advocated is democratic.

The following is a brief description of the various agencies employed at the William McKinley High School, St. Louis, Missouri, and a statement of the responsibilities that are delegated to them.

I. THE ASSISTANT PRINCIPAL ordinarily handles such discipline cases as come to the office, turning over to the Dean of Girls those girl cases that do not involve delicate situations with other teachers, and conferring with the principal on all serious cases that might eventually concern the superintendent or board of education. He has consultations with pupils regarding serious failure in studies and often with their parents as well. He has charge of the ordering of supplies from the supply commissioner, receiving and checking them up when they arrive and later approving the bills. Once a year he supervises the taking of the school inventory. When time permits, he visits classes, so that he may be able to co-operate intelligently with the principal in the grading and ranking of the teachers. In short, he is the associate of the principal, and together they decide practically all questions of policy or procedure. The intention is to give him such a broad experience as will prepare him to assume the responsibility of acting as the head of the school, temporarily or permanently, should the occasion arise, and his authority is recognized by teachers and pupils. The principal is frequently gone for an entire day and sometimes for a week at a time, but his absence causes no hitch whatsoever in the running of the school.

II. The office of DEAN OF GIRLS is important in a school having men as principal and assistant principal. The dean handles most of the girl discipline cases and advises the girls, individually

and in groups, regarding dress, personal appearance, hygiene, attitude toward boys, etc., frequently having conferences with boys who are concerned or interested. She chaperones dances, spreads, and other social functions. The position requires unusual tact, excellent judgment, a faultless appearance, poise and dignity, a cheerful disposition, just the right amount of sympathy, a forceful character and, last but not least, a sense of humor. ("A pretty big order," I hear you say.)

III. The INDIVIDUAL TEACHER, in addition to teaching five classes, performs a very important function as ADVISER to a group of pupils (usually twenty-five to thirty). Upon entering school, each pupil is assigned to an ADVISORY GROUP having a teacher as ADVISER, and ordinarily he continues in this same group as long as he is a member of the school. In this way, one teacher knows all about his work in all of his studies, from term to term, and becomes very well acquainted with him personally. In a sense, the adviser is "in loco parentis" to him. As adviser, the teacher makes out the individual time schedules or programs for the pupils of his group at the beginning of each term. He receives, records (for his own reference), and gives out the report cards to the members of his group, reporting serious cases of failure to the office for immediate and special action. The advisory group being the basis of representation in the STUDENT COUNCIL, it has frequent meetings, the REPRESENTATIVE acting as chairman under the supervision of the adviser.

The teacher likewise shares the responsibility for the general conduct of all pupils in and about the school.

IV. CHAIRMEN OF DEPARTMENTS are elected by the following departments for a term of one year:

- (1) English
- (2) Mathematics
- (3) History and other Social Sciences
- (4) Foreign Languages
- (5) Science
- (6) Commercial Branches
- (7) Manual Training, Household Arts and Drawing
- (8) Gymnastics and Athletics
- (9) Music.

These chairmen conduct the department meetings, held bi-weekly, alternating with the regular teachers' meetings. It is their respon-

sibility to explain the course of study to new teachers and assist them as necessary. They confer with the principal regarding improvements in the departments and represent the latter in the faculty council. The departmental organization affords an opportunity for co-operation within the department. It is thoroughly democratic, yet it provides for leadership and system.

In this connection it might be noted that the board of education has approved a plan for supplementing the supervision of the principal with DEPARTMENT SUPERVISORS for the entire system of high schools, which will probably be put into effect in the near future. It is hoped that the plan will result in the introduction of scientific methods of appraising the results of the teaching process and that it will unify and improve the teaching. It will undoubtedly be of great assistance to the principals in their grading and ranking of teachers.

V. The FACULTY COUNCIL, composed of the department chairmen, principal, assistant principal, dean of girls and moderator of the student council (a teacher) meets at stated intervals for the purpose of co-operating with the principal. Questions of policy, innovations, serious discipline problems, course of study, etc., are discussed.

VI. FACULTY COMMITTEES, consisting of one or (usually) several teachers, have important responsibilities delegated to them.

- (1) School program or schedule
- (2) Boys' athletics
- (3) Girls' athletics
- (4) Entrance examinations and credentials of pupils from private or out-of-town schools
- (5) Tardiness
- (6) Text books
- (7) Supplies
- (8) Library
- (9) School newspaper
- (10) School semi-annual
- (11) Funds for societies, publications, athletic organizations, etc.
- (12) Moderators of societies, senior classes, etc.
- (13) Senior averages and ranking
- (14) Entertainments, dramatics, etc.

(15) Two-year commercial course pupils

(16) Statistics, tests, and measurements.

The individuals who have charge of these matters are so carefully selected and become so expert that the principal devotes but little time to them, except as one field or another may engage his attention when the committees confer with him or when he himself takes the initiative in regard to some modification or improvement.

VII. The STUDENT COUNCIL, consisting of student representatives (usually about sixty) elected by the advisory groups, is given considerable latitude and authority in regard to many problems of student life, all of its decisions being subject, however, to the veto (rarely exercised) of the principal. Among other things, the council plans and enforces traffic rules, controls order in the lunch room, makes plans for and assists in the safeguarding of the personal property of the students, conducts contests between the advisory groups, helps to plan programs for the auditorium, officiates (in the person of the student mayor) at auditorium sessions, disposes of surplus funds (from athletics, publications, entertainments, etc.), handles the thrift stamp campaign, has general oversight of school newspapers and semi-annual, athletics and social functions, conducts elections, publishes yearbook of general information and actively encourages the observance of the HONOR CODE.

The plan is to secure the co-operation and participation of the ENTIRE STUDENT BODY by having regular meetings of the advisory groups, under the chairmanship of their several representatives. The groups are encouraged to discuss any questions that pertain to the welfare of the school and, through their representatives, to bring such matters before the council.

The council meets regularly during the fourth period on Thursdays, the same period on Tuesdays being reserved for such extra meetings as may be needed. It was not found practicable to hold the meetings before or after school. In this way a full attendance is secured.

Pupils are not eligible until they have eight units of credit and they must make a passing grade in at least three regular subjects or their equivalent.

VIII. The OFFICE CLERKS keep the records, prepare the payrolls, make out the quarterly, annual and other reports required by the superintendent, make out college entrance certificates, do the typewriting and mimeographing, wait on pupils at the counter,

answer the telephone and perform many other clerical duties. While their responsibilities are thus briefly outlined, it should be stated that they do everything that anybody else neglects or forgets, and are expected to know all that they are asked by principal, assistant principal, teachers, pupils, and janitors and that they seldom disappoint, meanwhile preserving a calm and cheerful exterior.

It might seem that, under this system, the principal would be entirely free for supervisory work, but this is unfortunately far from true, as all persons of experience realize. The principal is properly held responsible, by his superiors and by the public, for everything that happens at or pertains to his school. Consequently he must keep in touch with each and every one of the above-mentioned agencies. His superiors generally deal with him directly and parents frequently ask to see him personally. He is the GENERAL MANAGER and CHIEF EXECUTIVE. He must furnish the underlying plan and system, and his personality must be felt throughout the school. If mistakes are made, he cannot hide behind committees, faculty council nor student council. He must assume full responsibility. He must be the chief oiler and repairer of the machinery and must know when to discard it and replace it with something better.

PRINCIPAL W. C. REAVIS, UNIVERSITY HIGH SCHOOL OF THE UNIVERSITY OF CHICAGO, discussed Mr. Miller's paper.

DISCUSSION

PRINCIPAL W. C. REAVIS, UNIVERSITY HIGH SCHOOL, UNIVERSITY OF CHICAGO

A careful study of Mr. Miller's outline on "Team Work in the Management of a Large High School" should convince any one that the real reason for the sharing of administrative responsibility is that the job cannot be done effectively in any other way. Such reasons as the conservation of the principal's time, the development of teachers and pupils through participation, and the fostering of a democratic spirit are the results of team work in administration, rather than reasons:

To have effective team work, strong leadership and good-fellowship are necessary. This means that the principal of the high school

should be a real leader. If so, he will experience no difficulty in building an efficient teamwork organization in his school. This implies the development of two types of co-operation: (1) military, (2) voluntary.

The military type of co-operation requires that each member of the team shall consider himself a perfect part of a perfect machine, with a definite locus, a certain work, and the obligation to respond to the will of the leader.

For efficiency in the accomplishment of immediate results the military type of co-operation is eminently satisfactory. Its success has been demonstrated in industry and business as well as in war. When applied to the administration of a school system it produces results just as satisfactory, providing the leader is able to see and appreciate the fact that in dealing with human beings, immediate results must sometimes be waived when their realization would interfere with the attainment of ultimate ends.

The other conception of co-operation is that found in voluntary organizations, in which individuals associate as equals and in a democratic way. There is no question of inferior and superior rank. Loyalty to leader is supplanted by loyalty to the institution or the ideals it represents. The individual member of the group has a voice in the determination of policies. There is freedom of discussion and willingness to give and take, and action is voluntary, not determined by authority.

In the administration of the school both the military and voluntary types of co-operation are essential. The school is training children to fit into the industrial world which is organized largely along the line of military co-operation, and the social and political world in which the citizen's usefulness is determined principally by his voluntary co-operation. The school must teach the individual how to work with others as well as how to lead others to work with him. It must teach that liberty without responsibility is license and that no one is free to go his own way without regard for the things in which a good citizen is expected to participate.

If a school is expected to do these things for a pupil, its administrative machinery must be geared for the accomplishment of such tasks. This would require that the teaching staff possess the ability to develop both kinds of co-operation just discussed. The principal of the school should fully realize and appreciate that results from the pupils rest in the hands of his faculty and that unless his teachers

are trained in both types of co-operation through proper participation in the administration of the school, the training of the pupils is likely to be skewed in accordance with the administrative practices that prevail in his school.

Mr. Miller's second major point, the means used to distribute team responsibilities, might be discussed from the point of view of the principles involved in making team organization effective.

(1) In order to secure an efficient team, a common knowledge of policies, plans, and methods is necessary. The operation of this principle requires the constant interchange of knowledge and experience between the different members of the staff. No fact having a real bearing upon work is too trivial to be communicated, nor is any person so competent that he cannot learn from another person who has new experience or knowledge not already in his possession. The knowledge of the school head should permeate throughout the school system and should govern in so far as possible the activities of the teachers; the actual conditions faced by every teacher should be known by the principal and should determine in part the teacher's contribution to the control of the school in its general features as well as in its details. The quality of this common institutional mind, if this ideal common body of knowledge may be looked upon as constituting it, is obtained largely in the degree to which cooperation is developed.

(2) A spirit of loyalty and team pride should be developed. This principle makes possible the development of high standards of workmanship and a strong esprit de corps.

(3) Tasks should be assigned to the members of the team on the basis of capacity to perform certain parts of the common task. Not only should each be assigned to the work he is best fitted to do, but his capacity should be developed in the best way to do the task in hand. He should also see his own work in relation to the work of the whole school. The plans for his welfare should include the future as well as the present. He should be satisfied that his life is developing satisfactorily and in the right direction. This principle requires on the part of the school head a study of the needs of the individual teacher and an earnest effort to promote his individual and professional welfare.

(4) For the guidance of the leader in sensing the dividing line between work which he should perform and work in which the members of the team should participate, the following principle is sug-

gested: ONLY THAT WORK SHOULD BE DELEGATED WHICH CAN BE DONE TO GOOD ADVANTAGE BY THE STAFF, AND WHICH, IF PERFORMED BY THE EXECUTIVE HEAD, WOULD BE DONE AT THE EXPENSE OF SOMETHING MORE IMPORTANT. The adoption of this principle by the head of the high school would enable him to deputize the members of his staff for administrative work which they are capable of performing well, and as a result free himself for work which should be done by the school head only.

From the standpoint of the science of efficiency, it can be seen that team organization has potential possibilities for improving the managerial work of the high school. Team organization does not mean letting others do the work. It implies rational co-ordination and wholehearted co-operation, and the school that is properly organized along these lines should greatly add to its administrative efficiency.

SECOND SESSION

The second session was called to order on Tuesday, February 28, in the Ball Room of Hotel La Salle at 2:01 P. M. The Vice-President of the Association, Wm. A. Wetzel, Principal of the Trenton High School, Trenton, New Jersey, presided. Professor H. L. Miller of University High School, University of Wisconsin, spoke without notes on *Directing Study for Creative Thinking*.

DIRECTING STUDY FOR CREATIVE THINKING

H. L. MILLER

PROFESSOR OF EDUCATION, PRINCIPAL WISCONSIN HIGH SCHOOL,
UNIVERSITY OF WISCONSIN

1. *The Situation.* The lesson-hearing school, a survival of the fourteenth century *quadrivium* method of education, is still the typical school in our democracy. Teachers all over America still hear the lessons "said." The *regurgitation* of daily lessons goes on unabated. Boys and girls are thought to be sick and in need of perpetual rest-cures in the form of daily consumption of dabs of information under a regimental uniformity which emphasizes the militaristic theory of life. The corporate spirit is sacrificed to regimentation. The class group, instead of the individual pupil, is treated as the educative unit.

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It would be easy to say mean things about our conventional procedure. The lecture system is even worse than the recitation system. Both are wedded to the absorption of ready-made facts. "We toil," said Montaigne, "only to stuff the memory and leave the conscience and understanding void." Milton felt badly about it, too: "We hale and drag our choicest and hopefulest wits to that asinine feast of sow-thistles and brambles which is commonly set before them as all the food and entertainment of their tenderest and most docible age." But, gentle reader, I am not a rebel.

Yet, is it not true that the *recitation* belongs to an age when books were few and when schools were established to *impart knowledge* and to test the learner's absorption of facts? To recite (to regurgitate lessons) is to cite once more, to tell again, to repeat. The new teacher does not prepare a lesson, bound it on all sides by the *five formal* steps, and insist that all pupils shall conform to the pattern. The primary purpose of going to school is not *knowing*; yet, we still recognize as training and discipline the so-called voluntary attention which seems to be the ability to stare, ox-like, a disagreeable, uninteresting task or unintelligible thing out of countenance. The business of "holding the class" and "siphoning the vacuums" must appeal to any twentieth century, forward-looking mind as a tragic survival of fourteenth century education.

Our procedure has been reinforced by the ideal of organization since the day Horace Mann was captivated by the Prussian system of education. Life is squeezed into some educational formula or other, and the effort is made to turn out a standardized product. A methodology has been supported by a psychology built upon the theory of instincts *as data* with the result that groups of youngsters are regimented upon the theory that certain instincts, that we don't know anything about, are about to *burst forth* at given levels. Do we find any evidence of instances actually at work? May they not be just hypotheses? Nobody any longer really believes the mind works within any such rigid lines as are set down in the Herbartian steps. Yet we go on trying to negotiate education in a democracy in a kind of military lockstep, regimental uniformity—a procedure as ill adapted to modern life as the stage coach would be to modern transportation.

And just now our pedagogical commandments are suffering from an acute attack of mechanistic megalomania and its sequel, standarditis; some are happily growing convalescent. *Standardization of*

thinking has always hindered progress. The measurement fad is having its run. Tests of all sorts are being used to buttress fallacious arguments about people *in the making*. The difficulty lies in having a penchant for a single fact or group of facts. Are we not in danger just now of exhausting the supply of humus in the soil by this steady diet of proteins under this quantitative method extended to all studies in the curriculum? May we not be destroying the foundations for the cross-fertilization of ideas? The quantitative method has its proper and legitimate function in its field. Until we study "temperamental" attitudes, get at the biological foundations of human behavior, study defense mechanisms and protective coloring, we are liable to be victimized by an unhealthy fatalism in dealing with boys and girls. Let John's teacher say, "*John can't learn it,*" and the nerve of effort-making capacity is cut, and John's teacher proves an alibi. To substitute for the blighting "can'ts" a simple doctrine expressed about this way—"*John has not learned it yet*"—would be a world-shaking event, comparable to the invention of the combustion engine. With this new movement, really an old institution parading in the livery of science, we hear the rattling of the dry bones of minimum essentials of content, as if it were our primary business *to indoctrinate* the youth of the nation with a conventionalized, safe, and guaranteed set of ideas and ideals, forgetting that our social organization (state) is no cut-and-dried system, but the expression of a continually developing impulse to unify and co-ordinate our ideals.

Just when we are about to escape a deadening formalism; just when we are beginning to understand that the minimum essential is bound to become the maximum necessity; just when we are about to step up from the herbarium mode of education to a life basis, we find ourselves thrown back into the puzzle stage of education, asking pupils to answer tens of thousands of questions which rest on a 50-50 basis of chance of "rights" and "wrongs," or which fail utterly to challenge any creative or constructive thinking. Besides, isolated facts are taken out of context (tautology intended), often mutilated, and presented to youngsters in tests resulting in guessing and in recording ready-made answers. Moreover, the old errors recur. The ability to recognize a simple element in a relatively simple situation is no evidence of ability to use that same simple element in a new and relatively complex synthesis. The sheer mechanics of any subject in secondary education rarely needs to be learned in rote fashion. The simple elements may be cast up in a contest in which

the game may be made the basis of motivation. That is legitimate. But the mirror-minded pupil is not the ideal of a democratic education. To stuff and cram the memory is not vital education.

2. *Undirected Preparation of Lessons.* Lack of space forbids more than a mere mention of this important aspect of our problem. Any one with half an eye and with the happy mental condition of not "having been cut off as to his head" can make a first-hand study of the way in which lessons are "got." "Pa" and "Ma" agonize over son's algebra and daughter's assigned (Monday) theme. The good widow interviewed the superintendent in behalf of her flock of seven, suggesting that if it was all the same to him she would like to hear her children *recite* the lessons at home if the teachers would only *teach* her kiddies in school. But, it seems, we must keep the home fires burning educationally. Study a group of high-school youngsters in their habits of *getting* their lessons. Telephone is used: Jeremiah, how do you translate these hard sentences? And Constance takes it all down over the phone. Note the "spread," in a so-called supervised study period, of a solution of an exercise—right under the supervisor's nose, too. We have all met the *busy* college "student" who could "sit in" five minutes before class, get the hang of it, and make a passable stab at it in class. Some "goods" are borrowed outright and never returned—written themes and such. We leave this interesting story to the reader. There are great possibilities here for rich comedy.

3. *Varieties of Thinking.* Too much of our work results in types of thinking far below creative thinking. Our Mabels and Henrys are chattering on in our classrooms, saying and writing just everything and anything. It's a sort of reverie which sometimes results, accidentally, in a useful bit of thinking or poetry once in a while. Mabel, what will one pig cost if 20 pigs cost \$100? Mabel rattles it off: If 20 pigs cost \$100, one pig will cost $20 \times \$100$, or \$2,000; for 20 pigs is 20×1 pig, don't you know? And Mabel waits grinningly for the pedagogical benediction, wholly innocent of the prohibitive price of her class room pig. Mabel is the victim of *analysis*. When given the pedagogical stage direction, "Why, Mabel, don't you know you divide in a case like that," Mabel bolts it by the division route and gets the *correct* answer. Do we know, or do we care to know, that getting *the correct answers* to so-called questions and so-called problems is no evidence whatsoever that our kiddies (and college students included) *know* the correct answers? We

send our pupils to the printed page to assimilate, absorb, *learn* the facts *as such*, the conclusions and arguments of others *as such*, and then ask them to *recite*, regurgitate, repeat, rewrite what they have assimilated under all sorts of artificial standards, with the results that thousands of "students" thank God when they have *finished* their education in this and that course. Thinking? Yes. It is thinking of a sort. Practical thinking perhaps. A man has 40 cents and wants a lunch. He goes to Thompson's restaurant because he does not have \$5 to spend at the La Salle. Much of reasoning or making of decisions is of this practical variety, determined by circumstances.

There is also an enormous amount of *rationalization* in our schools. That means we spend a great deal of time and energy in finding evidence *to support a belief already accepted*. We are full of "good reasons" for supporting or opposing the League of Nations; what the "real reasons" are we seldom discover.

Gathering opinions, however "honest" or "scientific" they may be, and merely reciting them for the sake of the "loaves and fishes"—grades, diplomas, degrees—is deadening. "Nothing in education is so astonishing as the amount of ignorance it accumulates in the form of inert facts," says Henry Adams. The capacity of the human mind to resist the introduction of knowledge is not nearly so marvelous as the capacity of the "student" to absorb in a remarkably brief period enough facts to pass the course. "Philosophy Four" reads shockingly well. The good student in the course coached the clever intellectual loafer two days before the final examination. The "coached" duffer made a higher mark than his steady-working coach who took the course seriously from the first. There is irony in Philosophy Four. Many a pedagogue would have died laughing at himself had he ever developed any sense of humor. The old-time education considers the mind a graveyard, spacious and receptive. Data, events, knowledge of all kinds are so often dead matter ready for interment; the lesson sounds like a burial rite whether it be the dirge of Latin roots, or the dirge of tabourettes (manual training by the *amo-amas-amat* method)—a tedious ordeal, but very necessary in respectable places; the teacher, the only live entity in the analysis appears to be a combination of divine and undertaker; the examination is a sort of resurrection morning where, true to form, few resurrect.

Now, communicated facts may be made just as valid and important as self-discovered facts under some experimental questing;

but if only the former are given recognition, the great mass of dough is without leaven, and the salt has lost its savor. We need to think more about our thinking. *Enough* experimental questing should be done to enable us to hold in solution the mass of communicated facts, *enough* to give some taste for analysis and to furnish a basis of appreciation of man's task in building our civilization.

Creative thinking is possible even in the first grade. The child has already built his world before entering school. In every child is the stuff of aristocracy, and by that we mean the high potentiality for uprise or downslide according to circumstances and opportunity. The child's mimetic powers are tuned to the pitch prevailing in whatever concert room it happens to be an occupant of. Its creative genius is molded on the pattern of whatever performances happen to be staged there. This is the spirit of our new scientific humanism, and it expresses also our new faith in boys and girls. Capacity is an achievement, not a donation. Human nature is grown, built in the stream of life. A few children are born mentally deficient, but a vast number are gradually made so—dwarfed and stunted only by lack of opportunity. We have yet to conceive and build our technique by which human beings may grow to full stature. We spend our time and energy in critical, not constructive thinking. We exhaust ourselves in combating self-creative obstacles. *Freedom in work* is still confused with "honest" opinions and the anarchy of idle and irresponsible opinions.

And what are we to expect when the school promotes "habits of work" of this sort? (Adapted from an article by Professor Mead.)

Teacher: Class, come to order. Pay attention now. (The siphoning of vacuums is about to begin.)

T. Henry, you may read the first problem.

H. A piece of land has a frontage of 80 rods on a street. Into how many lots with a frontage of 60 feet can it be divided?

T. What will you have to do first?

H. Multiply. (Picture Henry drawling it out with a forced interest. It is no real problem for Henry.)

T. Multiply what? (Priming the old pump.)

H. Rods by feet.

T. How many feet in one rod, Henry? (Be careful! Now think! Pay attention, class!)

H. Five and a half.

T. Five and a half! Why, Henry!!!

H. I mean five and a half yards equal one rod.

T. Well, you might do it that way, too. (Think now!) What is it we do first?

H. Multiply. (After 10 minutes utterly wasted Henry arrives where he started, and the class is still exhorted to pay attention.)

T. Multiply what? Go ahead!!!!

H. Rods by feet.

T. Well, how many feet make one rod, Henry?

H. Sixteen and a half.

T. Correct. That's right. Go ahead.

(Really does Henry know the *correct* answer?)

Well, go on, Henry. (Contemplate the mind of the teacher still sitting in self-complacency at a salary of \$150 a month.)

H. $16\frac{1}{2} \times 80 = 1,320$ ft.

T. Now what must you do next with the feet?

H. Change them to lots.

T. And how would you do that?

H. Divide.

T. Divide what? Go on.

H. Divide by 60.

T. That's right. Go ahead.

H. $1,320 \div 60 = 22$.

T. 22 what?

H. 22 lots.

T. That's right. How many understand? (They always say yes to that.)

Is it any wonder we have tired Fridays and blue Mondays? Is it any wonder our students don't know anything? And then we try to measure what our children learn! Oh, complacent pedagogue! If the class *pay attention* to this ridiculous performance of Henry and his teacher, it is attention from the medulla oblongata *down*, not *up*. How could there be any spiritual explosion in such a formalism? Nothing gets over the loop. Mabel, as we noted, just chatters, chatters on, saying everything and everything without the slightest titillation of her higher brain centers. And yet, no commands are more frequent than these: Pay attention now, class! *Think*, John! Study your lesson, Susan! We are still milling tens of thousands of our children through the ritual in a kind of catechetical procedure. We are still in the puzzle stage of education. Here and there the

light is breaking. Here and there teachers refuse to be mechanicians. They are beginning to see that where there is no problem there can be no constructive thinking.

And then we pass resolutions in conventions assembled: "The schools nourished the spirit of democracy and produced a soldier whose initiative, resourcefulness, courage, and morale"—etc. Oh, ye of blind faith! Is Henry growing in power to do creative thinking? What are his classmates thinking about while Henry and his teacher are doing this fool thing? Henry is no near-idiot. The trouble is the belt is off his generator. The system and the teacher contrive to keep it off. Henry is bound in his intellectual swaddling clothes. If the other 29 pupils are dead enough there is no problem of "discipline"; where there are no problems of discipline there are no "bad" boys; where there are no "bad" boys the mechanical supervisor is prone to believe he is running a "good" school; it may be an "efficient" school and nothing more. The real question is, efficient for what? We are not contending that our young men failed in initiative, resourcefulness, courage and morale; we raise the question, Is the school developing these traits through its intellectual stress in the classroom? There are life-giving oases in our educational deserts. Here and there, in spite of dogma and system, good teachers are at work assisting boys and girls in the building of capacity.

4. *New Procedure.* We can only illustrate our new procedure conceived along lines of creative thinking.

Try it on a little fellow 7 or 8. Use the method of Agassiz. Have you ever heard the story of Robinson Crusoe, Tom? No. (Now don't tell him and ask him to repeat it. Don't have him read it and *reproduce* it. That is the traditional way. It is not the way to develop thinking boys and girls.) Well, Tom, once there was a man left on an island all alone. There was a picture of a ship on the ocean in his home. (Furnish some data for Tom's mind to work on. Set up some hypothesis. Now it is becoming Tom's problem.) Tom, how did he get on that island? *Tom will tell you.* Go on fabricating controls. One day, your man (shall we call him Robinson Crusoe?) got sick, etc. What could you do, Tom, if you got sick, that your Robinson Crusoe could not do? *Tom will tell you; i. e., Tom will create his story* if he has not been repressed and corrupted to the very roots.

All sorts of challenges will occur to the directors of activity as the movement goes on. Not all stories need to be created by our

Toms and Marys in a *controlled* environment that does not repress. Some, in fact most, are to be read. And after Tom has entered upon the quest of building his own Robinson Crusoe, he may be put in the way of De Foe's story. It can be done cunningly. Robinson Crusoe furnishes the *motif* of all vital history.

Again, a teacher growing up as a director of activities, began his work in the "Social Studies" by saying: Let us write our own chapters. Each pupil provided himself with a loose-leaf notebook. The first chapter in the Story of Man's Progress was the "Development of Modern Science." They started their books by contemplating what our world would be if every dynamo in the world were cut off at once. Each built his own chapter. The printed page was used after raising real problems in their discussion. Faraday was pictured there in 1831 with a strip of copper which he was revolving between the poles of a horseshoe magnet, and that was the first dynamo. Over against it was placed a cut of that marvel on the Milwaukee road, the modern Westinghouse electric locomotive. These pupils (10th grade) were grouped for their readings. Slosson's Creative Chemistry was devoured. John Dewey's chapter on Scientific and Empirical Thinking was read by these boys and girls and read intelligently—far more intelligently than students of "education," teachers, supervisors, superintendents read it in our courses given *in abstracto* in normal school, college, and university summer sessions. Chapters on custom-thought and power-thought and the means (machines and cross-fertilization of cultures) of breaking down these old forms of thought were read. History books, science books, scientific periodicals were used. One boy gave a "lecture" on high frequency currents; another on radio and wireless. A good thing discussed in class was shared by all and worked into their own chapters in their own composition. Another chapter on "Transportation" was begun by having the pupils relate their experiences in travel. Railroad folders were collected. The cable was thrown back into a *moving past*, and the ways of travel in Greece and Rome were woven into the story of man's movement over the earth. Another chapter on "Sanitation" was developed in a similar manner. One boy worked up his own set of lantern slides and exhibited them to the class. He had worked up slides showing the way the Romans did it and then on into his own city. Incidentally these books produced by the pupils were substituted for the bi-weekly ritual of themes in the subject labeled English.

The point in all this is to get some productive question in front of some potential answer and then to use the printed page for a real (creative) purpose. There is no muddling here over thought questions and fact questions—a dreary chapter in the history of “pedagogues.” To ask what the causes of the civil war were, is not a thought question, if it is answered on page 301 in the text. The answer is there before the (so-called) question is put. Few indeed are the questions which really precede some potential answer.

Geometry can be taught by our Robinson-Crusoe procedure. The pupil may, if *we* will, *build his triangle as a thing to think with*, and not a thing to be recited.

Try it and test it for yourself. Use a small pad and write on it just what you say in a real, directed procedure. All on our marks now. The new challenge is 30 original exercises. Have your class of 35 pupils start and *work like the devil in the classroom*. Have them report their difficulties to you in this new “lesson,” now a challenge, lasting three to five days. You are not just policing study now. You are not sitting up in your little furtive pulpit writing a letter and gazing down at the mourners in the pews now and again, waiting for an impudent signal to stop study and *recite* for 32½ minutes. (Ineffable administrative bosh!) No, you are an active agent, very silent, perhaps, in this working group. Each pupil describes his dilemma to you. You write on the pad just what you say to each one, or each group, or to the class as a whole. *Then you may not talk too much.* Something like this ought to appear on your pad. (We leave it to the reader to supply the pupil’s dilemma.)

Ruth. “Supplements.” (This is what the teacher said and Ruth goes on and thinks it through.)

Henry. “Can you think exterior angle?” (And H. does it and it works.)

T. “How is BM drawn?”

S. “State all facts in your hypothesis in terms of your figure.”

W. “Talk to your figure.” (Talk to it? Yea, verily, talk to your figure. And he does and it works.)

O. “Trace your angles with your finger as you read them.”

B. (The teacher did not say a word; he just pointed out a significant construction line.) Oh! says B.

I, G, H. “Go to board over in corner there together and work out your angles in degrees.”

M. “Either way (alternative) will lay golden eggs for you.”

Mc. "Yes. Try it."

P. "Use page 62." (A page of summary directions.)

R. "Try to use proposition XXX," etc., etc. How absurd to hold that difficulties come by the clock! In the learning process difficulties are always unique.

All of you. "Here is a little algebraic device that will help you." All gave 5 minutes to its development.

H, M, O, D and C. "Come over here. Draw your figure and quiz each other. Put a construction line through point O some way."

L. "What are some of the ways of proving segments equal?"

C. "Try another exercise, and let this one soak a while."

About the third day, you will find two or three pupils emerging with the whole challenge *mastered*. Let them assist you, taking a pad and writing down just what they say to a class-mate needing a suggestion. They can do it. Here is a sample from Tom's pad, Tom being one of four pupils who assisted in the experiment, from which these samplings are taken.

B. "What do you know about the altitudes of some triangles? Look it up."

H. "How do you draw a line parallel to another line?"

K. "You are not using all of your hypothesis. You have a good chance to work in a fact you have omitted."

C. "Keep your finger on p. 62. Now what are the ways of proving angles equal?" Etc.

At the end of this challenge the class comes to a vigorous discussion of their work. It looks a bit like a recitation to the uninitiated. But it is a very different thing indeed. There has been some thinking at the *fork of the road*, at the point of crisis. The pupils are assisted in choosing some alternative. They are directed in seeking some plan of attack. They are supplied with facts that will enable them to go forward in their thinking. Any earnest thinker who tries some such plan of directing activity as is suggested in this procedure will soon sense the problem of creative thinking.

The scientific method may be interpreted in manifold ways. What is required, first of all, is some way (plan or hypothesis) of thinking. Data are needed. Facts and materials to work with are absolutely essential. The thinker examines his materials, facts and data. He throws the cable back into his experience, gathers up relevant data, sifts evidence, and always redefines his way of think-

ing in terms of his facts. The artist does just this thing. The scientist does it. The whole attitude of our twentieth century approach is coming to be one of experimental questing. Why should we fail to orient our teaching in school and college to this new technique?

A teacher of English, long since weaned from the literary canon, reads to his kiddies (9th grade and a whole mess of them—36, and 3 college seniors in with them *participating* in an honest way)—reads some ballads, tapping the meter lightly with his pencil. And the “bad” boys start keeping time with their feet. This new teacher says, “Come on all of you and tap it lightly as I read.” After a few were read he says, “How do you like them?” “Bully,” they say. “Then come to the desk and help yourselves.” An armful of books was brought in that day and he said, “Get off there now in groups of a half dozen and have one read aloud in each group.” A bear garden! No order! Bedlam! cries the visitor (perhaps a “suspector”)! Too much noise! And we have to ask him what kind of noise? And we may have to say, if you don’t want children to get out of order, and if you don’t want them to fail, don’t set up a mediaeval order and a lot of standards for them to get out of and fail in. And the class reads ballads in groups while the teacher guided the procedure here and there. Then he said, “How would you like to write some ballads yourselves?” They did, and the ballads they wrote did not have to be expurgated. Some of them were beautiful. Here is a sample of one of the best, one of six stanzas by a twelve-year-old girl who was not a “prodigy” in any mythological sense:

Fair Isabel of Rockloyal
At her window stood alone
Gazing the way her lover rode
When he to the wars was gone.
(Five more just as beautiful.)

Every pupil in that class wrote ballads and the college seniors tried their hand at the same game. Out of a controlled environment with some way developed, some “general frame of reference,” as it were, the pupils were enabled to create their ballads.

It can be done in chemistry, this building of initiative—this creative thinking. Try culminating “projects.” This was done. Two classes in chemistry spent the last eight weeks of the year on some big problem. Each pupil selected his “project.” Each pupil spent

some sixty hours in the laboratory on his own project. Such examples as paints, chewing gum, dyes, baking powders were worked out of raw materials into finished products; the various stages were exhibited and explained in legends and good English. The teacher was a consulting expert, always there to guide activity. Some pupils came out with negative results. The teacher sought to fix responsibility in each pupil and to assist each one in developing resourcefulness and initiative. The same general principles in our new general method are illustrated here. The effective socialization, if anybody likes to hear that good word, was brought about by having each pupil explain his achievement in full before the class. At commencement time these pupils exhibited their "projects," and took keen delight in explaining them to their friends and parents.

These illustrations could be multiplied indefinitely.

It may seem wicked to refer again to our conventional practices: The temptation is irresistible. To stop with destructive criticism is unprofitable. The pioneer must subdue the land, and keep down and cut out the water-sprouts as he drives forward with his constructive program.

Let Edward Yeomans clear the field:

"Class, turn to page 43. John, what is the subject of the story on that page?"

"Now stand up and read till I tell you to stop; stand up straight, please, and hold your book in your right hand. Speak clearly, and hold your head up. There—that's the first sentence; now tell us what mood the verb is in. What is the rule for the subjunctive mood? Can't anybody remember that? Why, we had it just day before yesterday. I will write it on the board; for that is something you must know before you go on to the next grade (9th)." (Don't miss the incentive, patient reader.)

She writes: *The Subjunctive Mood is used in a subordinate proposition when both contingency and futurity are expressed, or when the contrary fact is implied.*"

And, of course, these mirror-minded children (produced by the system) can learn to repeat the words in the definition and pass to the next grade. And yet, the defenders of the *status quo ante*, the *sat sapienti*, call us rebels and radicals when we urge something better than typical fourteenth century methods with, of course, certain modifications out of recent studies in psychology. Like Ephraim

joined to his idols these defenders cling to their self-created obstacles, thereby making constructive thinking very difficult.

Creative thinking is a possibility in our schools. We shall have to see to it that there is no lesion of the social sense. We can not have both regimentation and the corporate spirit. If we mean to work out a technique in keeping with our new scientific humanism of this twentieth century, if we would build for a shared life, if we would have *freedom in work*, if we would release the potentialities of our youth through education, we shall have to think of a new ethic, a new gripping of the problems of self-mastery, and perhaps abolish the "teacher" and try to turn our schools into the hands of directors of activity.

Another very mean thing to repeat, is to say that if high-school teaching is bad, college *teaching* is worse. The lecture system compels even a greater absorption of facts than the recitation system. The piling up of dabs of information by card-wood methods against the day of examination serves to perpetuate the vicious circle. College students become our high-school teachers. They teach pretty much as they are taught. *The way to improve high-school teaching is to improve collegiate teaching.* When we go right down to the roots of this problem we shall probably find less need for so-called educational and pedagogical courses, and I hasten to say I hold no brief for these courses. Most of them are conducted in the good old academic fashion contributing very little except to the confusion of the candidate. There are notable exceptions.

Here is a university professor (teacher) of repute. He is doing constructive work both in teaching and research. He has a large registration of freshmen and sophomores in history—some 250. He used to prove an alibi by shifting the responsibility on the high school. He has quit that aggravating practice. Now he has for his assistants graduate students who have taught. He still lectures. The purpose is not to deliver facts and opinions, *as such*, ready-made arguments and conclusions, but to set problems and raise questions and direct thinking. He divides his students into study groups of some fifty each. They report at specified hours in his laboratory—a room equipped for work as well as for lecturing. Books are there, source materials, etc. The students have these graduate student-teacher assistants. *Each student writes the chapters in his loose-leaf book, i. e.,* he actually builds his history. These *books* are left each day with the assistant. He scrutinizes and checks them. Two red

marks automatically direct the student to the professor. If the student is loafing, he soon knows it—early in the semester, the first week or month in fact. If the work of the student indicates inability to study, inability to do creative thinking, the professor assists him in this problem. The main point is the fact of responsibility for the student's thinking and habits of work. The method is one of building human nature or intelligence—a fine example of creative thinking. An environment and a technique are furnished conducive to creative effort. The professor's lectures are a part of the material to be *used* by the students in building their own *chapters and book*.

Give us a new general method of this sort in collegiate teaching, and our high-school teaching will be improved immeasurably; we may be able then to detect evidences of progress in our pupils from year to year. For it is idle to talk of education as the production of changes in the individual when the procedure effects no vital changes. It is perfectly possible for pupils to "set" through a course without making any essential change in their intellectual and spiritual life. A venter may be rubbed on, but the first shower after the course is finished washes it off.

It is not strange that a high degree of correlation is found, so universally, between so-called intelligence tests and school marks, when we remind ourselves that no vital intellectual changes have taken place under the ordeal of the accumulation of school marks. What would be the result if we actually built a procedure in our schools and colleges in which constructive, creative, scientific thinking were the goal of every day's work? That would be a world-shaking event comparable to the discovery of fire, or of the going down to the sea in ships of men with hearts of treble brass, or the invention of the alphabet or the dynamo. Constructive, creative, thinking for all normally-constituted children and youth is the challenge to our twentieth century forward-looking teachers and educators.

It appears that God does not care enough about our human nature to change it; so it must be our task to organize a technique that will produce or build our own human nature. It won't help much to shoulder the responsibility off on "gametes" and "chromosomes." We stand accessories before the fact; we are here. We should escape all insidious forms of pedagogical fatalism in facing youth. It is our job to use intelligence and turn modern science toward self-mastery and the development of these terminal buds of an immortal evolution.

5. *Summary.* Ability to recognize a simple element in a relatively simple situation is no final evidence of being able to recognize (or use) that simple element in a moving-learning (relatively complex) situation.

Inability to recognize (or use) a simple element in a relatively simple situation is no final evidence of being unable to recognize (or use) that simple element in a moving-learning (in-context) situation or synthesis.

Creative thinking undercuts and transcends the statistical method.

The task of education, as I see it, is the production of a people capable of thinking, and with a mental attitude which is tolerant, fearlessly honest, expectant of change, and creative.

Our schools have carried down the past tradition of "learning" as the acceptance of facts, while what we need is a mind capable of analyzing problems in the light of facts.

We have had our educational programs based on certain given analyses of human nature, "instincts," and so forth, when, as a matter of fact, psychologists cannot agree as to what the instincts or elements of human nature are. We have only a mind-body organism sensitive at every point and capable of being molded by whatever stimuli are presented. We *make* the human individual; and educational mass production on a uniform plan is surely not our highest hope.

The creative thinker is the hope of our human future and the great teacher is the one able to stimulate curiosity, to instill interest in searching for knowledge and enthusiasm before the challenge of a problem. This shift of emphasis in a new general method will serve to create the new teacher in the stream of life.

You see, I am taking it for granted that we shall never use the public educational service to impose any *one* form of political, economic, or religious belief. This is the darkest sin against the future. *The test of our educational system is—does it develop individuals who are vividly alive to the achievements of the human spirit in the mastery of nature, and capable of creative thinking.*

DISCUSSION

The discussion of Professor Miller's paper by PROFESSOR A. L. HALL-QUEST, SUPERVISOR OF HIGH SCHOOLS OF CINCINNATI,

OHIO, was read, in the absence of Professor Hall-Quest, by Principal E. H. Kemper McComb of Emmerich Manual Training High School, Indianapolis, Indiana:

One cannot refrain from wishing, after listening to Professor Miller's graphic discussion, that all those who agree with him (and their number must be considerable) would become champions of a teaching procedure that is based on common sense. Professor Miller calls attention to situations of which most of us doubtless have been a part either as learners or as teachers. It matters not whether one calls the point of view, elaborated by Professor Miller, Supervised Study, Directed Learning, Inductive Method, Social Period, or any other pedagogical term. Perhaps our danger is that we accept terms too easily and use them too glibly, forgetting the essential meaning of which the term is simply a label. It is quite useless to consider the adoption of any plan of directing study for creative thinking so long as the bulk of America's public school teachers persist in using the third degree method of education. Questions there must be, for they are stimuli, but the questions asked by a sage are quite different from those asked by a gossip. There are questions that open up a whole realm of reflections and others that simply are like the tapings of a woodpecker. The criticism of the question and answer method does not involve any policy of abandoning the question as an educational essential, but rather exalting it to a place where it becomes the quickening of the thought processes into eager action.

An English educator, Dr. Frank Hayward by name, has suggested the rather startling use of the detective story as a means of stimulating pupils to think. The method is simple: give the pupil the story without the denouement and let him construct his own solution of the mystery. Professor Miller's suggestions in the field of literature, mathematics, science, etc., are, of course, worthy of adoption. The teacher will find in a recent publication by Professor Boraas, "Teaching to Think," a stimulating discussion. Professor Parker's series of articles on "Thinking" in recent issues of the *Elementary School Journal* are also of considerable value. Educational literature is well supplied with references to discussions of the problem and project method whose purpose, obviously, is to provide situations in which the child will learn by thinking and creating. The need of revising the emphasis in teaching technic is recognized by practically all students of education. It is not at this end of the line that we are

weak, but rather at the other, namely, the teacher training and supervision functions.

There seems to be an increasing interest in the point of view that children in school should be taught how to study; that the school is to be, not an examination hall, but a study center where the intellectual work of the day shall be concentrated under the best possible conditions; where the teacher and pupil find a clearing house of such educational materials as will be mutually cultural and educational. The difficulty seems to be to develop a technic of direction and supervision that will be sufficiently different from traditional teaching to make the new clearly distinguishable. Professor Miller points the way to such technic. Our teacher training institutions would contribute a priceless treasure to the cause if they would assign an increasing number of graduate students to investigations in this field of technic.

For example, a considerable amount of investigation needs to be done in the field of the assignment. The technic of supervising reference reading has not been sufficiently perfected. The central library plan in the typical high school may need a thoroughgoing reorganization in the form of departmental libraries, and such a reorganization in turn would involve a different type of classroom from that which now prevails. School administrators and architects have evidently not been gripped by the truth involved in discussions like the one presented by Professor Miller. The average public school classroom is not planned for the purpose of stimulating pupils to think and create. It is fashioned to conform to traditional recitation method. Not only must there be a reorganization along the lines mentioned, but a longer period that provides for the warming-up process and the second swing of work and thinking must also displace the present fragmentary, local-stop plan of schedule. If this results in a longer school day, to which practically all of the formal school work is confined, with a minimum of home study (and this only of the informal variety), we shall find that the school day is really not lengthened, but shortened. We can hardly expect pupils to do much thinking under present conditions of piecemeal assignments and frequent stop schedule. Thinking requires time. It is evident that we have a long distance to go before we reach the heights where the public school is an institution whose chief function is considered to be not simply supplying pupils with necessary data for social intercourse, but also with such data as will become the mate-

rials with which the pupil reaches conclusions and solutions and evolves into a creator of ideas and concepts and ideals which, after all, are the essentials of progressive and ever-ascending civilization.

At this juncture President Prunty named the personnel of the following committees:

NOMINATING COMMITTEE

1. John L. Stewart, High School, Parkersburg, W. Va.
2. Louis P. Slade, Senior High School, New Britain, Conn.
3. David E. Weglein, Director of High Schools, Baltimore, Md.
4. S. M. Brame, Bolton High School, Alexandria, La.
5. R. T. Hargreaves, Central High School, Minneapolis, Minn.
6. Dwight E. Porter, Omaha Tech. High School, Omaha, Neb.
7. John L. G. Pottorf, McKinley High School, Canton, Ohio.
8. J. S. McCowan, High School, South Bend, Ind.

RESOLUTIONS COMMITTEE

1. R. R. Cook, High School, Topeka, Kan.
2. L. L. Forsythe, High School, Ann Arbor, Mich.
3. Lee Byrne, Director of High Schools, Dallas, Tex.
4. Chas. H. Slater, Cleveland High School, St. Louis, Mo.
5. A. J. Burton, East High School, Des Moines, Ia.
6. C. B. Walsh, Friends' Central School, Philadelphia, Pa.
7. T. J. McCormack, High School, La Salle, Ill.

NECROLOGY

1. Otto F. Dubach, Central High School, Kansas City, Mo.
2. M. H. Willing, Central High School, Springfield, Ill.
3. W. C. Graham, Wilkinsburg, Penn.
4. H. H. Culley, Glenville High School, Cleveland, Ohio.
5. Mrs. Lucy L. W. Wilson, South Philadelphia High School for Girls, Philadelphia, Penn.

AUDITING

1. G. W. Willett, Hibbing, Minn.
2. Eugene Briggs, Okmulgee, Okla.
3. Louis E. Plummer, Fullerton Union High School, Fullerton, California.

PRINCIPAL LEONARD POWERS OF FRANKLIN SCHOOL, PORT ARTHUR, TEXAS, President of the National Association of Elementary-School Principals, spoke without notes on *How May We Best Familiarize the Eighth-Grade Pupils with the Work of the High School?*

AN OUTLINE OF HOW HIGH-SCHOOL PRINCIPALS MAY FAMILIARIZE THE
SEVENTH AND EIGHTH GRADE STUDENTS WITH THE WORK
OF THE HIGH SCHOOL

Introduction: We may familiarize grade children with high-school work by establishing more points of contact.

- A. Through the Personal Touch: Sending High School to Grades.
 - 1. Addresses by High School Principal.
 - 2. Addresses by Department heads and teachers.
 - 3. Addresses by High School honor students.
- B. Through bulletins, pamphlets, and newspaper articles.
 - 3. Use of mimeographed messages from H. S. Principal.
 - 2. Use of charts from Departments.
 - 3. Use of standard booklets.
 - a. Presented to Grade children by individual.
 - b. Presented by Rotary or other club.
- C. By Exhibiting High-School products in Elementary Schools.
 - 1. Shop products.
 - 2. Traveling exhibits to be shown on High-School day or High-School week.
 - 3. Demonstration experiments performed in Grade school auditorium.
- D. By bringing Grade children to High School.
 - 1. Letter of invitation to Grade principal.
 - 2. Planning trip for visiting committee of Grade children.
 - 3. Publishing report of committee in local papers.
 - 4. Publishing report in High School paper which always reserves space for news from Elementary Schools and which is sent to Elementary School children.
- E. By dramatizing High-School ideals and methods in a play to be presented to Elementary School children.
- F. By encouraging active interest of Grade children in all High School contests.
 - 1. Arranging to have Grade children participate.
- G. By influencing policies of administration.

1. In favor of departmental organization in upper elementary grades.
2. In favor of best teachers for Grades.
3. In favor of larger Elementary Schools.
4. In favor of promotion by subject in the grades.
5. In favor of pupil self-government in the grades.

HOW HIGH-SCHOOL PRINCIPALS MAY FAMILIARIZE THE SEVENTH AND EIGHTH GRADE STUDENTS WITH THE WORK OF THE HIGH SCHOOL

We realize at once that familiarity depends for its degree upon the number of points of contact that exist. Our problem is to increase the number of opportunities afforded to grade children to meet with high-school children and their products and high-school methods of organization and instruction.

The high-school principal may establish personal points of contact with his future students. He may address them at their schools or, by special invitation, at the high school. He may address a letter to each of them. The letter or the address need not necessarily explain high-school methods. If he gets the stamp of approval for himself, if his personality receives a favorable reception in the minds of the children, he has accomplished much. A large part of the work of the American high school is to give the youth the highest type of leadership during a most important formative period. Go, then; tell these grade children how *YOU* will assist them to *SUCCEED*.

Heads of departments and certain teachers may go from the high school to the elementary school with messages about special offerings of the high school. These teachers may meet the children in class room units and offer helpful explanations and inspirational appeals. They may bring with them sample products of their work. They may learn from the principal of the grade school what certain particular children are interested in learning. Each of these visits will help and the character of some teacher or the appeal of some subject may be the deciding factor which wins a decision to attend high school.

You may also send leaders from your student body back to their schools to describe their successes. You may make the successes of students from each school the successes of the school itself. A

certain elementary school in a slum district sent the honor pupil of each graduating class of a high school where twenty other schools were sending students. This record was kept for five years in succession. Not only may these student leaders of yours describe successes; they may successfully perform experiments in the presence of the grade children.

The high school may make use of printed pamphlets. These may be written by high-school students, teachers and principals. They also may be written by successful business men in the community who place a high value upon their high-school training. The high-school paper may allot a certain share of its space to contributions written especially for grade school children and to grade school news. The children of the grade schools should all subscribe for the high-school paper, but it would pay to send certain issues to all grade pupils with the compliments of the managing editor. In a certain city a citizen sent each seventh grade child a copy of "Will It Pay to Go to High School?" by Thos. E. Sanders of Racine, Wisconsin. In other cities Rotary clubs and other organizations have done likewise. The high-school principal may learn of this and other pamphlets and may influence some individual or club to help him use it.

The high-school principal may send high-school products to elementary schools. Traveling exhibits may be sent from school to school. These may arrive on high-school day or may be centers of interest during high-school week. The boy who loves to work with tools will find products in wood and metal that will appeal to him. The boy who loves to work with electricity will be amazed when a wireless set is brought into the auditorium and operated before him. The girl who is interested in language will be delighted to see the charts showing how Latin functions in English and other languages. There is not a department of instruction in the high school that may not participate in these exhibits. There is not an elementary school child who will not be interested in them.

The high-school principal may establish a visiting day for grade children. If his facilities are not adequate to accommodate all of the upper grade children from an entire school, he may entertain from each of the graduating classes. If these committees are carefully chosen and entertained they may make such forceful and interesting reports to their classmates that all will want to go to high school. An advisory committee from the high-school faculty should care-

fully plan the trip. Reports of it should be published in the local newspaper and in the high-school publication.

We learn of life through the press and through the stage. A carefully written play with an interesting plot which carries the hero or heroine through high school could be written and presented by high-school students. It would appeal to grade children and might be the deciding factor in the lives of many.

All high schools are now interesting children of the grades in high-school contests of all kinds. It is possible in many such contests to attract grade school children by having them participate. The preliminary basket ball game between two schools in the high school district will entertain the spectators before and between halves of the high-school game. Debating and declamatory contests may be planned so that grade school children will appear on the same program with high-school children.

In closing, I wish to solicit your support for all administrative policies which will decrease the differences in method of handling upper grade children and high-school children. Lend your support to those principals who favor departmental organization in the upper grades. There is no reason why the large elementary school should not promote by subjects; no reason which cannot be met with a successful plan of organization.

The high schools have been enabled to make more provision for individual choice largely because they have had more students and fewer students per teacher. Lend your influence to support large elementary schools and the highest quality of teachers in the upper grades.

Finally, it seems to me that this matter is of sufficient importance to warrant the appointment of a committee from your department and a committee from our department to make further investigations and to report to both bodies a year hence. This would please me greatly as the first step toward a better mutual understanding between us, and I shall lend my time and efforts to see it done.

The Association then proceeded to the discussion of the general subject, *Adaptation of High-School Curricula to Students of Varying Capacity*. SUPERINTENDENT IRA J. BRIGHT OF LEAVENWORTH, KANSAS, presented his paper without notes.

THE INTELLIGENCE EXAMINATION AS THE DETERMINING FACTOR IN THE CLASSIFICATION OF HIGH-SCHOOL STUDENTS

SUPERINTENDENT IRA J. BRIGHT

LEAVENWORTH, KANSAS

A year ago last fall we began an investigation in the Leavenworth schools primarily to determine whether or not a reliable prognosis could be made of the scholarship attainment of high-school students in the various school subjects by means of an intelligence examination so that in the future a better classification of high-school students might be made and, secondarily to provide the teachers in the high school with a statement of the mental abilities of the individual members of their classes, that they might better adapt their methods of teaching, the subject matter of their courses, and their requirements to the needs of the individual members of their respective classes.

I am sure no one would question the statement that the intelligence quotient or index of an individual is a contributing factor in determining the success of this individual in school subjects, yet there certainly is a question as to how potent a factor the intelligence quotient is. Some contend that the habit of industry, the condition of health, the character of the home environment are more important factors than intelligence in determining the success of an individual in school. So we sought to determine whether or not there is a positive correlation between accomplishment in the school subjects and intelligence; to determine whether this correlation, if it exists, is more pronounced in some subjects than in others; to determine, if possible, for the different subjects, that intelligence level below which profitable work is not likely.

The Terman Group Intelligence Examination was the intelligence test used in this study. This examination was given to all high-school freshmen at the time this study was made and has been given to all freshmen entering the high school from our elementary schools since that time. All the tests were given by the same person, a man trained in giving tests, so that there was absolute uniformity and reliability in the giving of the tests. All grading and statistical work was done in the superintendent's office and under his immediate supervision and direction.

The scholarship grades of all freshmen were secured from the Teachers' Grade Sheets filed in the principal's office at the close of the quarter.

The correlation coefficient mentioned in this study in every case refers to the Pearson Product-Moment Coefficient of correlation.

That we might use the seventy-five-percentile, the median, and the twenty-five-percentile as bases for comparing the results of this study and also as bases for the organization of class groups the semester following, a distribution of the intelligence scores of all freshmen was made. From this distribution we found the median intelligence of the freshmen group to be 97.3; the seventy-five-percentile to be 126; and the twenty-five-percentile to be 76. We have, so far as possible, grouped children in their academic classes according to these standards, placing children whose intelligence scores are above the upper quartile in classes by themselves; children whose intelligence scores are between the median and upper quartile in classes by themselves, etc. In other words, we divide our high school pupils into four groups on the basis of their intelligence scores and assign them to their academic classes according to their quartile rank on the intelligence scale. Let it be understood, however, that a pupil may readily pass from one of these groups to another as his work in class warrants. This eliminates the danger that might result from an error in classification. While a pupil's assignment to a class of high rank or low rank depends upon his intelligence score, whether or not he shall remain in that particular class depends entirely upon his work in that class.

The following table shows the distribution of all freshmen by intelligence scores and by ages. Eleven years means from 11 yrs. 1 mo. to 11 yrs. 11 mo.; 12 years means from 12 yrs. 1 mo. to 12 yrs. 11 mo., etc.

Intelligence Score.	AGE							Total
	18	17	16	15	14	13	12	
170-179	1	2	1	1	5
160-169	3	..	..	3
150-159	5	2	..	..
140-149	1	3	4	1	1	10
130-139	1	1	4	4	3	1	14
120-129	5	3	4	2	14
110-119	1	2	6	2	..	11
100-109	1	5	10	3	1	20

Intelligence Score	18	17	16	15	14	13	12	Total
90- 99 .....	..	..	1	6	10	3	1	21
80- 89 .....	..	1	3	4	9	6	..	23
70- 79 .....	..	..	3	9	9	3	..	24
60- 69 .....	..	..	3	2	3	2	..	10
50- 59 .....	..	..	2	3	3	1	..	9
40- 49	1	..	..	5	3	..	..	9
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	1	2	16	49	74	31	7	180

A study of the above table shows that in spite of the process of selection that has been going on from the time children enter the elementary school until they enter the high school, there is still wide variation in mental ability among high-school freshmen. In this case the variation ranged from 42 to 178. This table, I think, shows very clearly the necessity for a better classification of high-school students and a better adaptation of teaching methods and subject matter to these varying needs.

Incidentally this table shows that in the high school we may expect the younger pupils to have the higher intelligence scores. It shows that the median intelligence scores for pupils of age 12 is above 120; that for pupils of age 13 is above 100; that for pupils of age 14 is above 90; that for pupils of age 15 is above 90; and that for pupils of age 16 is above 70. This, coupled with the fact shown below that the younger pupils make the higher scholarship grades, fully answers the question as to whether or not children now enter the high school at too early an age.

SCHOLARSHIP-AGE TABLE

Age.	Median Scholarship.	Failures.
Under 14 yrs. 5 mo. (lower quartile age for freshmen).....	87%	4%
Over 15 yrs. 5 mo. (upper quartile age for freshmen).....	79.6%	20%
All freshmen	83.9%	11.3%

The above table shows that only 4% of those whose ages were under the lower quartile age for freshmen failed in their academic courses, while 20% of those whose ages were above the upper quartile age for freshmen failed. It is clearly evident that a major portion of our failures in high school come from over-age, low intelligence group.

The correlation table following shows the distribution of algebra scores and intelligence scores.

ALGEBRA GRADES

Intelligence. 70-74	75-79	80-84	85-89	90-94	95-100	Total
170-179 .....	..	..	1	..	2	3
160-169 .....	..	..	2	..	1	3
150-159 .....	..	..	..	1	5	6
140-149	2	2	1	..	3	8
130-139 1	2	3	2	4	..	12
120-129	1	1	2	4	5	13
110-119 3	..	..	1	2	2	8
100-109 2	3	..	4	4	4	17
90- 99 2	3	2	4	5	..	16
80- 89 4	4	5	3	1	2	19
70- 79 2	8	3	3	3	1	20
60- 69 3	4	1	1	9
50- 59	5	1	2	8
40- 49 2	1	1	1	5
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Total	19	33	19	27	24	147
Medians	84	78	84	99	106	124
<hr/>						
	84	78	84	99	106	124
						97

A review of the above table will show that there is a marked tendency for those with high intelligence scores to make high scholarship grades in algebra. It will be observed that the median intelligence of highest scholarship group is higher than the median intelligence of the next highest scholarship group, and so on with one exception.

The correlation coefficient for this table is plus .50.

For the more detailed distribution we found that practically 90% of those receiving the highest scholarship grades in algebra had intelligence scores above the 75-percentile for the whole freshmen group; and that 71% of those receiving the lowest scholarship grades in algebra had intelligence scores below the median intelligence for the freshmen group. This is significant, for it shows that intelligence is a dominant factor in placing children in the higher scholarship groups. It shows that there are a great many more children of high intelligence making low scholarship grades than there are children of low intelligence making high scholarship grades.

To further test the conclusions formed from the scholarship grade distribution in algebra summarized in the table above, we gave an educational test in algebra to all pupils enrolled in algebra the past semester. Following is the correlation table giving the algebra test scores and the intelligence scores.

ALGEBRA TEST SCORES

Intelligence										
Score.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	Total
170-179	1	1
160-169	1	..	..	..	1	2
150-159	1	..	1	2
140-149	1	1	2	1	..	5
130-139	1	1	2	..	..	..	4
120-129	1	2	..	..	1	1	..	5
110-119	1	1	2	1	..	—1—	1	7
100-109	4	1	..	—2—	..	..	7
90- 99	1	..	..	2	—3—	—3—	..	1	..	10
80- 89	1	—3—	3	2	2	..	..	11
70- 79	..	2	—1—	4	1	1	1	..	..	10
60- 69	..	1	..	3	1	1	..	1	..	7
50- 59	..	1	2	1	..	..	1	..	..	5
40- 49	1	..	..	..	..	..	..	1
—	—	—	—	—	—	—	—	—	—	—
Totals	1	4	7	21	14	11	10	5	4	77

The coefficient of correlation for this table is plus .44.

After all, the real test of the advantages to be gained by classifying high-school students on the basis of the intelligence examination is to compare the results of classes organized on that basis. Following is a table showing the results of a standard algebra test given to an A class, a class of individuals with intelligence scores above 126 (the upper quartile) and a C class, one of individuals with intelligent scores near the lower quartile (76). These classes were selected at random.

STANDARD TEST IN ALGEBRA

Number right.	A Class.	B Class.
18	..	..
17	6	1
16	3	..

Number eight	A Class	B Class
15	4	..
14	1	..
13	..	2
12	1	..
11	..	1
10	1	2
9	2	1
8	2	3
7	..	2
6	..	1
5	..	..
4	..	3
3	..	7
2	..	1
—	—	—
Median	15	6

This table tells its own story and little discussion of it is necessary. It is evident from the results of this test that the A group is doing much more thorough work than the C group and that is no comparison between the two groups in ability in algebra after a semester's work in algebra.

In comparing the work of these two classes it is interesting to know what the teacher's judgment is. Following is the teacher's statement:

"The A division was much more easily taught as each new principle was grasped with one demonstration and in many cases the individuals of the A group needed no help while in the other class it was necessary for me to develop each step carefully and to repeat the development often in order to 'drive it home.' The members of my A group do extra work and many work far ahead of the day's assignment. Some have been able to delve into factoring and 'study out' the methods alone long before we reached that division of our work."

It is obvious from these facts that a large number of our first year high-school students are enrolled in algebra who, on account of their low intelligence, can never receive material benefit from it. These studies indicate that there is practically no chance for the pupils whose intelligence scores place them in the lower quarter of the distribution to do anything like creditable work in algebra. It

is certainly evident that if algebra is required of all high-school students the subject matter, requirements, and methods of teaching should be modified to meet the varying mental abilities represented in the freshmen group.

The table following shows the correlation between scholarship grades in Latin and intelligence scores. The correlation coefficient for this table is plus .65.

LATIN GRADES

Intelligence	70-74	75-79	80-84	85-89	90-94	95-100	Total
170-179	..	..	..	1	2	..	3
160-169	..	..	..	2	..	..	2
150-159	1	..	1	2	1	..	5
140-149	..	..	1	1	—..—	..	2
130-139	..	3	1	—1—	1	—	6
120-129	1	..	7	2	2	..	12
110-119	2	..	..	..	1	..	3
100-109	..	2	1	1	..	..	4
90-99	1	..	..	1	..	..	2
80-89	2	3	1	2	..	..	8
70-79	2	3	..	1	..	..	6
60-69	1	..	1	..	..	..	2
50-59	..	..	..	..	..	..	..
40-49	1	..	..	..	..	..	1
	—	—	—	—	—	—	—
Total	11	11	13	14	8	..	56
Medians	85	84	122	129.5	137	..	..

It will be observed from this table that those pupils whose intelligence scores are high tend to make high scholarship grades in Latin. The lowest intelligence score represented in the highest scholarship group is above the median intelligence of the entire freshmen group.

As was the case in algebra only those with high intelligence scores get into the higher scholarship groups in Latin. Eighty-five per cent of those whose intelligence scores were below the median of the whole freshmen group received scholarship grades below 80%.

A comparison of the results secured in an A group in Caesar with a C group in Caesar is given in the table following:

CAESAR

	A Class	C Class
Median scholarship grade.....	82%	77%
Failures	12½%	50%

It is safe to say, therefore, that pupils whose intelligence scores on the Terman Group Intelligence Scale are below 76, the lower quartile, have practically no chance of making a passing grade in Latin and that those pupils whose intelligence scores are below 97, the median, will do unsatisfactory work in Latin.

The table following gives the distribution of English grades and intelligence scores. The coefficient of correlation is plus .72.

ENGLISH

Intelligence	70-74	75-79	80-84	85-89	90-94	95-100	Total
170-179	..	..	..	..	2	2	4
160-169	..	..	..	..	..	2	2
150-159	..	..	..	1	4	2	7
140-149	1	2	..	..	3	—3—	9
130-139	..	2	3	3	5	1	14
120-129	..	..	1	6	—5—	2	14
110-119	2	3	1	3	1	..	11
100-109	3	2	4	—3—	6	1	19
90-99	3	2	—5—	7	2	..	19
80-89	2	—5—	2	3	5	2	19
70-79	—2—	7	7	6	1	..	23
60-69	3	2	2	1	..	..	8
50-59	1	1	2	3	2	..	9
40-49	3	1	1	1	..	..	6
	—	—	—	—	—	—	—
Total	20	27	28	37	36	16	154
Medians	80.5	85	86.5	95	122	145	..

This table shows readily that there is a close correlation between teachers' marks in English and intelligence scores, the median intelligence scores of the respective scholarship groups being in exact correspondence. A study of the more detailed distribution shows that 70% of all those who received the highest scholarship grade in English had intelligence scores above the seventy-five-percentile for the whole freshmen distribution. Only 3½% of those whose intelligence rating was lower than the seventy-five-percentile succeeded in making the highest scholarship grade in English. A study of the

detailed distribution of English grades and intelligence scores warrants the statement that if we predict for those whose intelligence score is above 120 the highest scholarship grade, we would hit it three times out of four and that we would be right 24 times out of 25 in the prognosis that none whose intelligence scores are below 120 would make the highest scholarship grade.

The Charter's Language test was given to the first year English classes during the semester which ended January 27, 1922. Following is a table giving the distribution of scores in this test and intelligence scores including all the pupils in these groups whose intelligence scores were known.

CHARTER'S LANGUAGE SCORES

Intelligence.	0-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	Tot.
	0-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	Tot.
170-179	1	1
160-169	2	2
150-159	1	1	2
140-149	1	1	—2—	4
130-139	2	1	2	5
120-129	1	2	..	1	4
110-119	1	3	—2—	..	6
100-109	3	2	1	1	7
90-99	2	1	—4—	1	..	8
80-89	1	2	4	2	2	..	11
70-79	1	—10—	2	..	..	13
60-69	—2—	6	1	..	..	9
50-59	3	3	3	..	..	9
40-49	1	..	..	1	1	..	..	..	3
	—	—	—	—	—	—	—	—	—
Total	1	..	1	11	30	22	9	10	84
Medians	65	75	97	112	145	

The coefficient of correlation for this table is plus .54.

This table shows that pupils who made high scores in this standard language test also had high intelligence scores and adds strength to the statement that intelligence is a dominant factor in the success of high-school pupils in English.

The following table gives the distribution of scholarship grades in citizenship and intelligence scores.

CITIZENSHIP GRADES

Intelligence	70-74	75-79	80-84	85-89	90-94	95-100	Total
170-179	..	..	..	..	..	..	..
160-169	..	..	1	..	..	..	1
150-159	..	..	..	..	..	=1—	1
140-149	1	1	1	..	1	1	5
130-139	1	..	2	..	1	..	4
120-129	..	..	1	3	..	..	4
110-119	..	..	..	2	..	..	2
100-109	1	2	2	2	—2—	..	9
90-99	—..—	..	—5—	—2—	..	..	7
80-89	1	2	3	2	1	..	9
70-79	2	—6—	1	2	..	..	11
60-69	..	5	2	..	..	..	7
50-59	..	2	1	..	..	..	3
40-49	..	2	..	1	..	..	3
	—	—	—	—	—	—	—
Total	6	20	19	14	5	2	66
Medians	95	71	95	105	107	155	..

The correlation coefficient for this table is plus .50.

The following table gives the distribution of scholarship grades in handicrafts and intelligence scores. The term handicrafts includes manual training, domestic art, and domestic science.

The following tables give the comparative grades made by A and C groups of students in the various high-school subjects. The grades are taken from the teachers' grade sheets for the semester ending January 27, 1922.

ENGLISH

	A Group (Intelligence above 120)	C Group (Intelligence below 80)
Median scholarship grades estimated in percents.		
Median scholarship grades.....	92.2	79.4
Percent failed	7.7	20.9

GEOMETRY

Median grade	86.6	77.0
Percent failed	0.0	28.5

ALGEBRA

Median grade	86.4	76.1
Percent failed	4.8	41.6

That intelligence is a dominant factor in determining the degree of success a high-school student will attain in the academic courses is apparent from these tables. How absurd it is to hold students of work and so many of them fail altogether. How much better it is the slow groups to standards so high that few of them do successful when the pupils are grouped according to their abilities and the courses adjusted in such a way that it is possible for all students to do the work required of them with some degree of success and pleasure.

SCHOLARSHIP GRADES IN HANDICRAFTS

Intelligence							
Score	70-74	75-79	80-84	85-89	90-94	95-100	Total
	F	3	2—	2	1—	1	
170-179	..	..	..	..	..	1	1
160-169	..	..	..	..	..	1	1
150-159	..	..	..	2	..	2	4
140-149	..	2	..	1 1	..	1	4
130-139	1	..	..	4	..	3	8
120-129	..	..	..	..	..	1	1
110-119	0	2	..	..	..	1	3
100-109	0	1	..	4	..	—2—	7
90-99	..	—2—	..	7	..	2	11
80-89	—1—	1	..	—11—	..	2	15
70-79	..	..	..	8	..	..	8
60-69	..	2	..	2	..	1	5
50-59	..	1	..	2	..	2	5
40-49	1	2	..	2	..	..	5
	—	—	—	—	—	—	—
Total	3	13	..	43	..	19	78
Medians	85	95	..	85	..	105	

It will be observed that the correlation between teachers' marks and intelligence scores in the handicraft subject is slight. In other words high-school pupils with very low intelligence will encounter less difficulty in the handicraft group of subjects than in the academic group. The natural inference is that pupils with low intelligence

should be assigned a maximum of work in the handicraft courses and a minimum of work in the academic courses.

In order to test further the validity of the tables and facts given above, we made up a list of the names of those whose intelligence scores and scholarship grades were markedly inconsistent and sent back to the teachers (but without giving the intelligence scores) together with a questionnaire asking the teachers to mark the trait or traits in the case of each individual which, in their judgment, most accounted for the scholarship grade received. The traits listed were: high mentality, low mentality, inattention, application, laziness, industry, health, etc. There were very few cases in which the teachers' reports did not confirm the conclusions prompted by the intelligence distribution.

The intelligence examination in the cases of the brighter pupils gives the teachers and principal a powerful lever to use in bringing a pupil to a higher level of scholarship and to a higher level of industry. It is an exceptional individual who will not strive to measure up to a high standard of ability if it is clear to him that he really possesses ability. The intelligence score is an objective representation of his ability for which he has the greatest respect. He knows that it is not affected by the teacher's opinion. It, therefore, carries a much stronger appeal than any other type of stimulus. Our high-school teachers are much interested in the intelligent examination and are making good use of the information which it provides. There are frequent teacher-pupil, principal-pupil, and teacher-principal conferences relative to the mental abilities of pupils and their work in class. Certainly, a school system cannot be said to be working efficiently until the teachers in that system are provided with all the information possible concerning the capabilities of the children whom they are to teach and until the teachers are sufficiently well trained to be able to adapt the subject matter of their courses, their methods of teaching, and their requirements to the varying needs of their respective groups, demanding full exercise of the powers and abilities of those of high intelligence and demanding of the individuals of low intelligence only such response and such rate of work as is consistent with their limited mental capacities.

The foregoing facts, I believe, warrant the following conclusions:

1. That the intelligence examination clarifies the teacher's prob-

lem as it defines for her the possibilities of every member of her group.

2. That the intelligence examination is a powerful agent of motivation as it is natural for children to want to measure up to their ability once that ability is known.

3. That high-school students whose intelligence scores on the Terman Scale are below the standard median for their grade may not be expected to do profitable work in the foreign language or mathematics group.

4. That high-school children with low intelligence have less difficulty with the handicraft courses than with the academic courses.

5. That in all courses high-school students should be grouped according to their intelligence indices and the courses simplified and adapted to their mental abilities so that all students may have an opportunity to do successful work and thereby receive some degree of satisfaction from it.

6. That the system of administration be sufficiently flexible that individuals may pass readily from group to another on the basis of the work they do in class.

7. That class groups of high intelligence not only do a much higher quality of work but also a much greater quantity of work than the class groups of low intelligence.

8. In general, that the intelligence quotient is the dominant factor in determining the degree of success individuals may achieve in their high-school courses and, therefore, that the intelligence examination should be the main factor in the classification of high-school students.

PRINCIPAL ARNOLD LAU OF ROCK ISLAND HIGH SCHOOL, ROCK ISLAND, ILLINOIS, spoke without manuscript on *Adaptation to Group Needs on Ability Bases in Ninth Grade English*.

ADAPTATION TO GROUP NEEDS ON ABILITY BASES IN NINTH GRADE ENGLISH

PRINCIPAL ARNOLD LAU, ROCK ISLAND HIGH SCHOOL,
ROCK ISLAND, ILLINOIS

I. History of the Experiment

Three years ago we found that something must be done about our first year English instruction to get better results. It was evident

that our course of study did not meet the needs of the students coming here. How to modify the course and best adapt it to most individual needs, insofar as these can be met under the system of group instruction.

The work of the 9a (first semester) classes in 1918-19, both those entering in September and in January, was observed and a record kept of the most apparent difficulties. At this time the course was a combination of composition and literature. In a series of English conferences the 9a work was discussed and the instructors agreed that the greatest need of the 9a students was more work in oral and written composition.

The next step was the working out of a definite statement of just what we wanted the 9a students to know and be able to do. The statement below of things to be accomplished was made on the basis of a threefold division of students. We knew, of course, that the learning rate varies greatly, and the threefold division was taken as the most practicable of administration in our school.

The standards for the C (3) section are for the group of these whose intelligence makes necessary a slower learning rate. The B (2) section standards are for those of average intelligence, and the A (1) section for the more rapid learners. These statements are based on the *needs* as revealed in the analysis of the work and tests, but are tentative insofar as they are an estimate of what can be expected from the different groups. They are therefore subject to revision as progress in technique and administration reveals more definitely differing group needs. The score card shown is an effective device in recording and analyzing needs and determining teaching emphasis.

MINIMUM REQUIREMENTS IN ENGLISH 9A SECTION C (3)

I. *Grammar:*

A. Know the basic parts of a sentence.

1. Subject, predicate, object, predicate noun, predicate adjective.

B. Know the simple forms of sentences.

1. Simple, complex, compound.
2. Declarative, interrogative, exclamatory.

C. Know the difference between a phrase and a clause, and between a dependent and an independent clause.

II. *Punctuation:*

- A. Use a period at the end of a statement.
- B. Use a question mark at the end of a question.
- C. Use a comma to separate the terms of a series.

III. *Capitals:*

- A. Use a capital letter to begin a sentence.
- B. Use a capital letter to begin proper names.
- C. Use a capital letter to begin the months and days of the week.

IV. *Sentence Construction:*

- A. Must not write or set off a dependent clause or a phrase as a sentence.
- B. Must separate two distinct sentences.

V. *Diction:*

- A. Must distinguish between—
 - 1. their and there.
 - 2. are and our.
 - 3. an and and.
 - 4. where and were.
- B. Must master a minimum of two new words a week; spelling, definitions, use.

MINIMUM REQUIREMENTS IN ENGLISH 9A-SECTION B (2)

I. All the minimum requirements for a C section.

II. Additional requirements.

A. *Grammar:*

- 1. Must avoid gross disagreement of verb and subject, as:
We was going to town.
- 2. Must recognize simple modifiers: words, phrases, and clauses.
- 3. Must use the proper forms of verbs, see, do, come, sit, set, lie, lay.
- 4. Must not use them as an adjective pronoun.
- 3. Must use the proper forms of verbs, see, do, come, sit, lay.

B. *Punctuation:*

- 1. Use comma to set off words of address.
- 2. Use comma to set off apositives.

3. Use comma before the simple conjunctions, and, but, or, nor, and for when they join members of a compound sentence, unless this sentence is short and the members very closely related. (Should always be used before for, to distinguish from the preposition.)
4. Use comma to set off a clause interrupting a quotation.
5. Use quotation marks to enclose a direct quotation.
6. Use quotation marks to enclose both parts of an interrupted quotation.
7. Use an apostrophe to form the possessive case of a noun.

C. *Capitals:*

1. To begin a direct quotation.
2. To begin all important words in the title of a theme.
3. To use capitals to begin only the names of languages in giving subjects of the curriculum.
4. Avoid the use of capitals to begin the names of the seasons, unless personified, and the names of the points of the compass.

D. *Diction:*

1. Distinguish between—
 - a. to, too, two.
 - b. quite, quiet.
 - c. your, you're.
 - d. its, it's.
 - e. hear, here.
2. Master a minimum of four words a week; spelling, definition, use.

MINIMUM REQUIREMENTS IN ENGLISH 9A-SECTION A (1)

- I. All the minimum requirements for B and C sections.
- II. Additional requirements.

A. *Grammar:*

1. Be able to analyze simple sentences containing not more than two phrases.
2. Be able to analyze compound sentences containing two simple clauses.

3. Be able to analyze complex sentences containing one dependent clause.
4. Know the parts of speech (not various subdivisions) and uses.
5. Know the declension of the personal and relative pronouns.
6. Know the principal parts of a verb and the tenses of the indicative mood.
7. Use the nominative case of the pronoun after the verb to be.

B. *Punctuation:*

1. Use commas to set off distinctly parenthetical expressions.
2. Use commas to set off introductory phrase or dependent clause at the beginning of sentence when necessary for clearness.
3. Use the semicolon to separate the members of compound sentence when not joined by a conjunction.
4. Use single quotation marks to set off a quotation within another.
5. Write out numbers consisting of one or two words and use figures for those consisting of more than two, unless a series of numbers is being used.

C. *Capitals:*

1. Use a capital to begin North, South, etc., when they name sections of the country.
2. Use capitals to begin the words high school only when naming a specific high school.
3. Use a capital to begin words as street, river, college, when used to name a specific street, etc., in all work of literary nature.

D. *Construction:*

1. Avoid long, incoherent sentences thrown together without plan.
2. Avoid sentences distinctly lacking in unity.

E. *Diction:*

1. Use said in past tense instead of says.
2. Distinguish between who's and whose.
3. Distinguish between respectively and respectfully.

4. Distinguish between know and no.
5. Master a minimum of six new words a week; spelling, definition, and use.

III. ON WHAT BASIS ARE STUDENTS TO BE GROUPED ACCORDING TO LEARNING RATE?

We first tried the judgment of 8th grade teachers and found it fairly accurate, but too many misplacements were evident. Next we supplemented the teacher's judgment with the Illinois General Intelligence Test and found the misplacements reduced, but results were still not quite satisfactory. Experience reveals what must be clear to all: the safest way is to take the teacher judgment, school records and mental test scores for the *preliminary* basis and then follow this with a "tryout" in class work before making a final adjustment as to the section best suited to the students' needs and abilities.

The following table shows the grouping according to teacher judgment and Illinois Test scores, before rearrangement, of 112 9a (1st semester) students entering January, 1921.

Basis for classification:

Sec. A—Score 110.

Sec. B—90-110.

Sec. C—70- 90.

I. Q.	A. Sec.	B. Sec.	C. Sec.	Average I. Q.'s
60- 69	..	..	..
70- 79	..	1	8	For A—Section 115, Range 108—
80- 89	..	1	20	126.
90- 99	..	15	6	For B—Section 100.9, Range 93—
100-109	3	31	1	115.
110-119	16	3	..	For C—Section 83.6, Range 70—
120-129	6	..	..	96.
	—	—	—	
Totals	25	51	36	
Number of				
Section	1 Sec.	2 Sec.	2 Sec.	

6. Misplacements—13.4 percent.

After Grammar Test and tryout in classes, the following misplacements developed and students were shifted to another section:

Eight were shifted from C to B sections. In five of these the teacher's judgment proved the more accurate; in three the I. Q. score.

Two were shifted from B to A sections. The I. Q. proved the more reliable index.

Five were shifted from B to C sections. In three of these the teacher's judgment and in two the I. Q. was more reliable.

IV. WHICH OF THE ABOVE MENTIONED (IN II) OBJECTIVES ARE MOST IN NEED OF ATTENTION AND WHAT MUST BE TAUGHT?

A. The following Grammar and Composition test was given the first week to determine:

1. What was known of functional grammar.
2. To what extent it was functioning in composition.
3. Individual and group needs.

GRAMMAR AND COMPOSITION TEST

A. Tell what part of speech each word is and how it is used in the sentence:

1. The young travelers will visit distant countries
2. She is a very courageous girl.
3. The stars are twinkling in the sky.
4. Horses and dogs run swiftly.

NOTE: Parts of speech are: Noun, pronoun, verb, adjective, adverb, preposition, and conjunction.

Words are used as: subject, object of a verb, object of a preposition, predicate verb, predicate noun, adjective modifier, adverb modifier, preposition taking an object, and connective.

Form to use:

Word.	Part of speech.	How used in a sentence.
-------	-----------------	-------------------------

B. Underline prepositional phrases in the following sentences:

1. The bird on the branch sings sweetly.
2. The tops of lofty mountains are always covered with snow.
3. The finest trout are caught in deepest water.
4. He saw the fire from the window.

C. Underline the independent clauses in the following sentences:

1. The boy who won the contest is a Senior.
2. The farmer is plowing his field.
3. The girl answered when her mother called.
4. The door opened and the dog came in.

D. Underline the dependent clauses in the following sentences:

1. When they reached home, they were very tired.
2. The sap will not run if it is very cold.
3. Because he was fat, he had to remain after school.
4. The bear ran away while the hunter was loading his gun.

E. In the following selection place periods, commas, capitals, and quotations where necessary and make sense:

F. Paragraph where necessary:

king gorm had everything that a man could wish for in the way of riches and power the lives of his subjects hung on his word when he wanted amusement he gave great feasts in his castle or in his parks in spite of all these luxuries king gorm was not happy he could not sleep one evening a little shepherdess ragged barefooted and with an old sunbonnet on her head came to the castle she asked to see the king a little shepherdess like you can have nothing to say to our master said one of the soldiers at the gate as i know that he cannot sleep i have come to cure him of his sickness answered the little maid.

E. Write about 150 words on one of the following topics:

1. Things I Don't Like to Do.
2. One-Man Car System.
3. Southern Mountaineers.
4. My Gymnasium Class.
5. Interesting Facts About Antelope.
6. The Best Animal Story I Know.
7. Summer Sports.
8. Jim's Visit to Rattlesnake Mountain.
9. The Adventure of Buying a New Dress.
10. Camping Out.

(Test II is the same in the kind and possible number of mistakes, differing only in wording and form, and is given at the end of the semester.)

THE SCORE CARD

- a. Provides a record for teacher and student as to class and individual needs, and a record of progress and results. There is a score card for each student. We are not so much concerned with a student's grade, as with the *progress and improvement* he makes in his knowledge of functional grammar and his ability to *use* and *apply* this habitually in his speaking and writing. We find the card a useful device.

ENGLISH SCORE CARD

Name

Class

Rock Island High School Formal Grammar Test
Application Test in Original Work

FORM GRAMMAR

Parts of speech	Period
Functions in Sentence	Comma
Phrases	Semicolon
Independent Clauses	Colon
Dependent Clauses	Question Mark
	Exclamation Point
	Quotation Marks
	Capital Letters
Sentence Sense	Paragraph
	Apostrophe
	Spelling
	Period
Agr't of sub. and pred.	Comma
Agr't of ante. and pron.	Semicolon
Tense	Colon
Case of noun or pron.	Question Mark
Adj. for adverb	Exclamation Mark
Adv. for adjective	Quotation Mark
Double negative	Capital Letters
Wrong verb form	Paragraph
Sentence sense	Apostrophe
	Spelling

V. RESULTS—2ND SEMESTER, 1920-21.

1. The figures below represent the gains at the end of the semester as compared with the beginning. The gain means the decrease in the number of mistakes in the Grammar-Composition Test. The Grammar Test offered opportunity for 101 mistakes; the composition was scored on mistakes per 100 words. These figures are given merely to indicate how a crude measure, such as the average reveals differences and progress. What is by far of greater importance and significance is the individual record of the student.

RESULTS OF GRAMMAR AND COMPOSITION TESTS

Results Second Semester, 1920-21:

	A-Section	B-Section	C-Section
1. Average number mistages on 1st Test.	22.1	45.7	45.2
2. Average number mistakes 2nd Test..	11.9	30.4	24.7
3. Average gain on 2nd Test. This number represents the gain in terms of lesser number of mistakes.....	10.2	15.3	20.5
4. Gain for entire section in per cent..	47.1	31.1	45.4
5. Range of gain in per cent.....	23-83.3	6.5-54	4.3-60.1
6. Average gain in per cent.....	46.1	33.4	44.8

COMPARISON OF FAILURE STATISTICS

1. The first semester, 1920-21, the 9a classes were not sectioned or grouped.
 - a. Percentage of failures (ungrouped conditions).....13.4
 - b. Percentage of failures (grouped conditions)..... 8.27
 3. Percentage of reduction in failures.....38.28

These statistics represent two different groups, the group, first semester entered in September, 1920; the other in January, 1921. The general level of intelligence of the January group is lower than that of the September group.
2. The first semester of this year, 1921-22, we divided the September class of 9a students, (221) into two groups: in one group (99) there was no classification (mixed) on the basis of ability; the other group (122) was sectioned on the basis of

ability, as described in III. The following figures show the distribution on the basis of Illinois Test I. Q.'s to be fairly even.

I. Q.	No. of Students Sectioned Group.	No. of Students Mixed Groups.
60- 69	3	4
70- 79	6	6
80- 89	19	15
90- 99	30	29
100-109	31	25
110-119	24	12
120-129	8	5
130-139	1	2
	—	—
Total	122	99

Under these conditions the failure statistics are as follows: These statistics are corrected for special cases, i. e., a few cases where the failure was due to absence, or where the student would have failed had there been no special group in which he could go on with work he needed—have been considered as no failure or failure according to the judgment of the teacher and the test results.

Failure per cent in mixed group.....	14.
Failure per cent in sectional group.....	9.3
Percentage of reduction in failures.....	33.5

RESULTS—FIRST SEMESTER, 1921-22

The following figures again represent averages. The percentages are in terms of gains in functional grammar and in composition, the gain being calculated on the basis of the *decrease* in the number of mistakes in the second (end of semester) test. Again let it be pointed out that these figures are significant only as indicating general progress, and that the most important and significant records are those appearing on the *individual* score cards.

The mixed or unclassified group gained

In Grammar	43%
In Composition	31%

The classified group gained

In Grammar	58%
In Composition	37%

The figures below represent a comparison of the progress made by A, B and C students under classified and unclassified conditions:

C Students		
	Grammar	Composition
Classified	53.7%	40.3%
Unclassified	48. %	39. %

B Students		
	Grammar	Composition
Classified	60.5%	43. %
Unclassified	43.6%	3. %

A Students		
	Grammar	Composition
Classified	69. %	51. %
Unclassified	59. %	46. %

Note the *smaller* gain in composition, or the ability to apply knowledge as compared with the gain in grammar, in all students. We interpret this as follows: First, high-school freshmen do not write very involved compositions and the *opportunities* for making mistakes are not very large and vary greatly. Second, the results simply indicate another teaching problem or emphasis: that we are still teaching somewhat too much grammar *per se*, even though in the functional setting and that we must increase the opportunities for using it in original work for the purpose of *habituating* the use of correct forms.

VI. VARIATION OF WORK

The most important factor in grouping is the *actual adaptation of work* to group and individual needs and abilities. The following statements represent a beginning. They are not complete and are subject to changes as group needs necessitate differences in treatment. They represent some general but definite principles underlying differences in learning rates.

1. Quantitative variation (standards in II).
2. Differences in method.
 - a. In A section

Two-thirds less time than in C section for drill and re-testing in order to attain mastery.

More time for covering standards and (II) developing better technique and artistry in oral and written work.

More time for extra work, development of original ideas and imitative, group activities (classroom plays, poetry, etc.).

b. In B section

One-half less time for drill than in C section.

About twice as much time for presentation as in A section to secure ready application and insure mastery.

About one-half to one-third as much time for covering standards and developing technique, doing extra work, development of original ideas and activities as in A section.

c. In C section

Drill and retesting occupy one-half to one-third of the time. Presentation must be by numerous simple examples, prolonged by drill or simple examples with no complicating factors, before there is much application or mastery.

Much more individual instruction and direction. Cover minimum essentials only. Drill must be varied and recurrent. No time for artistry.

3. Differences in type of material.

a. A and B sections.

More complicated material in both grammar and composition work.

More opportunities for discussion of broader cultural type.

More variation in individual assignments.

More opportunities for presentation of original material.

b. C sections.

Simple, concrete material. Use of simple anecdote and description. Discussions of narrower types, e. g., immediate interests, vocational information, local institutions.

GENERAL

1. The following statements are the result of reports from and conferences with teachers regarding their own and students' reactions toward homogeneous and mixed classes. They are significant evidence that the homogeneous section process is producing better teaching attitudes and better results.

- a. Students' Attitudes.

In A sections—No discipline problems. Students are actually working all of the time. Stimulated by equal competition. Eager to progress—not bored. Impatient of delay when sure of mastery. Stimulated to do original work and investigate.

In B sections—Same as in A, except in lesser degree. More liable in B section to have greater variety of ability because of the very fact that they embrace the middle section and therefore more individual problems. But on the whole the B section students do better work than when mixed.

In C sections—More restless—more discipline problems. A blessing to slow people willing to learn. Not discouraged by superior competition. Respond to the stimulation of success and progress. Impatient of difficulties—easily discouraged. Demand individual attention. Impatient of abstract discussion, but respond to concrete materials.

- b. Teachers' attitudes.

1. Homogeneous sections make the problem easier because one knows what can be done with and expected of groups of similar mental attainments.
2. It makes individual instruction easier, especially in the C sections, because they are smaller and the students are more responsive because encouraged by individual attention and possible success.
3. It offers better opportunity for experimentation in methods.
4. It offers better opportunity to measure progress.
5. It makes possible the setting of definite goals for mastery.

6. It is easier, especially in C sections, to overcome lack of confidence characteristic of slow students.
7. It permits a variation of work for bright students, with whom this is most desirable.
8. It makes the whole job more definite.
9. It is gradually changing interest in subject matter to interest in individual students.
10. It makes possible giving the group what it needs instead of what we think they should have.

CONCLUSION

We again wish to emphasize the fact that the homogeneous section process is merely a device for "definitizing" and individualizing instruction and not a "separation of the sheep from the goats" for the sake of satisfying curiosity or playing with statistics. Statistically, the averages are significant only as indicating a general trend. The most vital statistics are those dealing with the *individual student*.

Thus far we have experienced no complications arising from the fact of segregation. We give a C section student an A mark in his section, but we also say so on our records. College entrance? First, how many in these groups go to college? Second, if they do, why not test the student on the college entrance blank?

Should the variation of work and standards to suit different abilities begin early enough, we could more intelligently guide the student's educational career into safe channels. Democracy? Is it democracy to attempt to adjust a strait jacket of attainments to human beings whose fundamental traits are their *differences* in abilities and needs? Is it democracy to *coax along* an individual whose capacity is limited, to the point where intellectual indigestion makes him leave school and take "any old job" he can get? Is it democracy to lead them to believe they are headed for the presidential chair and then throw them out on a delivery wagon? Or is democracy that organization of our educational facilities which will provide individuals with the *opportunity* to succeed because they are *encouraged* by their ability to accomplish what nature says they can do? Is it that organization which will take the individual, give him his training best suited to his abilities, and prepare him to be a success in his vocation, be it clerk or master? Which is democracy: making opportunities for *failure*, discouragement, and stratification on

artificial bases, or making opportunities for success, encouragement and social co-operation by facing the facts and *incorporating* these facts in our curricula?

MR. RAY H. BRACEWELL, PRINCIPAL OF THE HIGH SCHOOL OF BURLINGTON, IOWA, discussed Mr. Lau's paper as follows:

The development of our small exclusive high school of a generation ago into the recent large democratic high school has raised problems. In many cases the solution of these problems has been incident to the changes themselves. Other changes were made to meet present demands leaving to the future the perplexity of adjustments. The addition of courses in manual training, domestic science, commerce, music, art, and physical education has supplemented the old high school with its required course of study solely designed to prepare the select few for college with a broad course of study designed to give to all students direct preparation for the duties of life. This metamorphosis prodigiously increased our high-school enrollment. With increased enrollment came magnificent well-equipped more varied training were demanded. To a reasonable degree our buildings. The new school was popular. Teachers with better and universities and state schools have met the demands. In general, development has been gradual and changes satisfactorily adjusted.

One problem which was not at first recognized, now has the attention of leading educators focused upon it. This is the problem of making adjustment to meet individual differences found among students in our greatly enlarged enrollment. We have proceeded on the assumption that students have equal rights and consequently are entitled to the same training. We have not taken into consideration the possibility that among students the equipment for training varies and that uniformity may be fatal to certain types. The old school evaded the question pertaining to uniformity in methods of training. It also evaded the question of individual differences by eliminating students who did not meet its standards. The new school is to give training to all; it must therefore face the problem. It is not the business of the school to select; it must see to it that everyone is trained for citizenship according to his ability and that those who have the will and the ability shall also have the opportunity to develop leadership.

The old school not only maintained one course of study, but it maintained a single standard of accomplishment. Years ago it was

not considered necessary for everyone to go to high school. If a student did not meet the requirements set up by the school, the school refused to be responsible for his training. Public opinion now demands that all pupils remain in school until they are at least sixteen years of age. It is also generally understood that a boy or girl of high-school age should be in high school even though his preparation has not been satisfactory. Moreover, the small range of individual differences found in our old high school has been greatly widened by the varied home life, preparation, native ability, ideals, habits, and ambitions found among students who attend our modern high schools. To enforce a single standard under present conditions cannot help but work a hardship in many cases; either many pupils will fail from year to year, or the standards of the school must be lowered.

Many different plans have been advanced for taking into account individual differences. A broad course of study makes it possible for a student to elect the studies in which he is most interested, and which are most suited to his abilities. Many subjects, however, are yet required of all students. Moreover, many students have superior ability in all subjects and others have little ability in any. Some schools allow bright students to carry five subjects. The difficulty here lies in the tendency for such schools to have an equally large number of poor students attempting to carry five subjects because they failed in one of the preceding semester. In theory, the individual progress plan sounds well; in practice, it leads to a maze of details that absorb the energy of the teacher and of the school system. The individual method is also unsatisfactory because it is very expensive and does not take advantage of the social opportunities of the group organization. Teachers have attempted to maintain a single high standard regardless of the personnel of the classes. Percentages of failure have been known to run as high as thirty, forty and fifty per cent. Public opinion has justly condemned the practice. Supervised study helps all to do better work but does not lessen the range of individual differences. Finally school men have come to realize that under present conditions, it is a hard task to maintain a single standard of accomplishment without greatly lowering standards.

It is not the purpose of this study to argue the question of the existence of individual differences. Studies have been made that prove that these differences do exist. I am therefore going to assume that students do vary widely in their ability to master new subject

matter, to adapt themselves to new situations, and to think logically and accurately. It is also assumed that different students employ different methods of study and respond best to different class room methods.

The practice of dividing students into ability groups is based on the assumption that students vary widely in their ability to do the work of the class. Studies have been made to determine the relative work capacities of the brightest and the dullest students in a typical class. This ratio has been found to be about four to one.

A few years ago I conducted an experiment in geometry. During the first semester I followed the regular class room procedure in the teaching of geometry. At the beginning of the second semester the class was organized on a purely individual progress basis. The work for the semester was outlined in such a manner that no assignments needed to be made. There were no group recitations. The work of each student was checked by the teacher and an advanced student assistant. The whole eighty-five minute period was devoted to study, individual recitation, explanation, and checking. At the end of three months, a student whom I had passed at the end of the first semester with a grade of 95, completed the required amount of work of the course. At this time a second student whom I had passed at the end of the first semester with a grade of 70 had completed approximately one-fourth of the required work. The first student had shown initiative, originality and had done the work in a thorough manner. The second had been urged and helped at every stage of the game. I should estimate that the work capacity of the first student was more than four times that of the second. These students had been required to sit in the same class for a semester, receive the same assignments, listen to the same explanations, take part in the same discussion, respond to the same standards and in the end each passed the course and was given the same credit. My teaching experience does not convince me that this is an exaggerated case. It is typical of a condition that exists in almost any high school class of twenty-five students. So long as we attempt to teach groups of unclassified students we will be compelled to retard the progress and deaden the initiative of the strong and confuse and discourage the weak, by a class program calculated to meet the needs of the average student.

Segregation of students in ability groups is in my judgment the best method of taking into account individual differences. From the

administrative standpoint it permits us to go ahead teaching students in class groups. School men are being compelled to recognize the demands for economy and business efficiency. From the standpoint of organization and economy the class unit must be preserved.

The classifying of students into ability groups does not remove the problem of individual differences, it lessens the range of differences and tends to minimize the hardships placed on the extremes of the class. By lessening the range of differences the teacher can more easily adapt the work to meet the needs of the individual members of the class. From the administrative standpoint, segregation makes it possible to hold each student up to his own highest standard of accomplishment. The superior students can be forced to work to their maximum capacity or they will be failed into a middle group. The students of lesser ability can be moved forward at a pace suited to their own needs. Segregation makes possible a program of no failures without lowering the standards of other groups. In general, segregation makes it possible for superior students to do a higher type of work than they were permitted to do in the mixed group, it allows the average student to go on as he has done in the past, it permits the slow student to progress at a rate that removes the necessity of failures, repetition, and elimination.

The advantages of classified ability groups are probably greater from the psychological than from the administrative standpoint. Here again it is necessary that the class unit be preserved. Students need the social contact and close competition afforded by group recitation. The more uniform the group the greater the competition and the greater the mutual helpfulness. Just as we strive to secure a better working unit by limiting the study of physics to seniors, so the working unit may be further improved by grouping seniors according to their ability in physics.

It is argued that the weaker students are helped by their class contact with the stronger students. So far as I know there are no data to prove or disprove this statement. I would suggest, however, that the high-school age is the age of development. Students are supposed to develop most rapidly when competing with others of nearly equal ability. It might make the featherweight feel stronger to put him in the ring with the heavyweight, but I rather suspect that in this case it would be possible to find evidence to the contrary. It is also argued that to be placed in the slower section is a deadening humiliation. I suggest that high-school life should be typical of life

in the world of affairs. Here we must admit that we are rated according to our ability to do particular things well. My classification as a speaker may be one thing, as a singer another and as an artist yet another. It is no humiliation to me to be rated a poor speaker if I can prove to my own satisfaction and the satisfaction of those who know me that I excel as a singer. If I am good at nothing, it is true that the world will give me little consideration and I am not sure that I could show any good reason why it should. Ultimately, social recognition depends upon social efficiency. So it is in school. Students are segregated by subject. The student who poor in Latin may excel in mathematics, domestic science, manual training, or art. The student who in open competition can win recognition in no phase of high-school work will probably fail regardless of the school or the method. The idealist in school work may not recognize anything as impossible. The practical school man interested in returning to the taxpayer a fair interest on his investment, will analyze his school and determine its powers and its limitations.

It has already been suggested that the classification of students in ability groups makes it possible to maintain different standards in the same school system. This may mean different standards of quantity, quality, or progress. In the study of history we may have a quantitative reading standard, in English a qualitative standard in the writing of themes, in mathematics, we may maintain a progress standard. Then again the whole class procedure may differ in the case of different groups. In one group, work needs only to be suggested, in another, the work needs to be specifically assigned and definitely required. Superior students love to do some original thinking. Slower students learn best by routine drill. Here, we are acting in accord with principles maintained in the world of affairs into which the high-school student is about to enter. Some students will deliberately choose routine jobs because they are unhappy under new or changing conditions. These students love routine drill. Others will deliberately choose occupations in which there are opportunities for original, independent action. Students should be given every encouragement in school to fix habits and cultivate traits of character that will best fit them to meet the requirements of the work which they will elect to do upon leaving high school.

It is one thing to determine that a school program is worth while and quite another thing to put that program into practice. The plan of segregation in operation in the Burlington High School might not

adapt itself to any other school. There are, however, some general suggestions that may apply to all schools. The size of the school is important. The larger the school the greater the possibilities for segregated groups. The need for well organized administrative machinery has been emphasized. The office must be responsible for a program of segregation and must be organized to execute that program.

Among the first things to be done in starting out on a program of segregation is to define and limit as nearly as possible the meaning of school marks. Sooner or later school marks will affect the lines of grouping. Some group intelligence test should be used and a point score or I. Q. rating secured for each student before entering school. In the Burlington High School the principal visits each eighth grade graduating class and gives the tests during the first week of school. From time to time an opportunity to take the tests is given to students who have entered from other schools. Country students take the tests during the first week of school. The office should keep easily accessible, full and complete information concerning the character of work done by each student, his rank in the grade school, his score in the test, and the record of high-school grades in all subjects completed.

The office registers all students on the basis of a personal interview. This interview must of necessity be short. The student presents himself to the office assistant who takes his record card from the files, checks it to see that everything is recorded, enters his present program and last term grade. When the student presents himself to the principal or his assistant this card shows his rank in his eighth grade graduating class, his score in the intelligence test, his high school credit and grades to date, his present program and last term grade in each subject and by its color the course which he is following. All these data may be summarized at a glance and all play a part in determining the student's program for the next semester. You will understand that the student has already elected his course and knows just what subjects he is to take. You may ask why the interview, at all? For the sake of the exceptions. Nine students may pass by at the rate of one every two minutes but the tenth may have some special adjustment to make that needs to be carefully considered.

Segregation in ability groups demands a special program. Every precaution is taken to assign students at registration to the unit

which best meets his needs. It is always necessary to make transfers. A student's success in a given subject depends upon a multitude of forces, many of which may not have been taken into consideration. A student may do better or poorer work than expected. Again the standard of work maintained by a given student may change within the semester. The program must make necessary transfers possible. Any method of segregation that does not make it clear to the student that in the end what determines the group that he is in, is the character of work done will cost more than it is worth. The student must be made to feel that errors in assignment will be quickly corrected and that a change in the character of work done suggests a change in his assignment.

It can be seen that our program must provide for the different sections of a given class to fall within a given period. We assign approximately 50, 75 or 100 students to a class, then divide it into two, three or four sections, assigning a teacher to each section. The best working unit seems to be 100. In this case we would have one superior, two average and one retarded section. The number of students enrolling in a subject has much to do in determining the way in which the class will be segregated. In a school of eight hundred students it is easy to provide for classes of 100 in both first and second year English and still offer the subject in two different periods on the program. In some of the senior courses it is not possible to carry out a segregated program at all.

This paper has attempted to establish the necessity for recognizing the wide range of differences among our students by providing for different types of training, different rates of progress, different standards of accomplishment and different class room methods. I have argued that it is better to provide for these differences by organizing classes on the basis of approximate ability rather than to attempt to accommodate them within the unselected group. I have presented a working plan for giving instruction in groups selected on the basis of ability.

There are school men who will not approve of this program. The movement for segregation is new and will have to prove itself. The whole measurement movement is less than twenty years old. It is only since the war that intelligence tests have been accepted for general use in classifying students on the basis of their ability. We have allowed the fact that many college presidents were once uncouth farmer lads to cause us to look upon every boy as a prospective col-

lege president. We have resented any evidence that tended to disillusion this hope. To me there is nothing more significantly American than the fact that one's parentage or early environment does not limit his ambition or hope of success. I should hate to see the time come when the boy of rail-splitting surroundings and presidential capacity could not reasonably hope to rise to the level of his ability.

Our public school system is the strongest guarantee that all may succeed according to their ability and their efforts. The fact remains that society needs relatively few college presidents and nature has equipped few boys with the particular abilities required to earn the degree of Doctor of Philosophy. Modern society demands a variety of service and our cosmopolitan schools present a variety of abilities. Each individual should, while in school, have an opportunity to exercise powers, develop skills, and establish habits that best fit him for the service which he is to render to society.

The school is not at present organized to select one boy to be a carpenter, a second to be a judge, or a third to be a merchant. It can offer to the first industrial, to the second college preparatory, and to the third commercial training. The school may not pick out the successes or failures in life. It can urge each to do his best and provide for each to make progress according to his ability and his effort. What could be a better goal for our democratic high schools than to strive to adjust themselves to provide for each student to attend school for four years, follow methods that will best equip him to attain his own highest standards of excellence, and to accomplish his own maximum progress.

The chairman of the committee on *Standard Requirements for High-School Graduation*, HEADMASTER PHILIP W. L. COX OF THE WASHINGTON SCHOOL OF NEW YORK CITY, presented the following report:

STANDARD REQUIREMENTS FOR HIGH SCHOOL GRADUATION

COMMITTEE REPORT PRESENTED BY THE CHAIRMAN
PHILIP W. L. COX, HEADMASTER, THE WASHINGTON SCHOOL
OF NEW YORK

High-school graduation, like many other ceremonials of society has two connotations. It carries first those meanings that have be-

come attached to the word by past usage, and it also refers to the final stage of secondary education now in process of reconstruction and readjustment. In the latter sense, the significance of graduation is complex, to understand it means to understand the whole philosophy of the high-school curriculum, indeed of democracy itself. But there is no time now to go into this matter.

Perhaps a preliminary statement should be made regarding terms to be used:

"Program of Studies" refers to the total offering of the school.

"Curriculum" is a systematic arrangement of subjects in terms of a purpose to be accomplished; for example, a Commercial Curriculum, a College Preparatory Curriculum.

"Curriculum Differentiation" means merely that pupils must select one curriculum rather than another.

"Core-Curriculum" or "Constants" refer to those subjects that are prescribed for all pupils and which are similar in kind and amount for all; for example, ninth grade English.

"Curriculum Prescription" means those subjects within a given curriculum which all pupils electing that curriculum must take; for example, bookkeeping in a commercial curriculum.

"Curriculum Electives" refer to those electives within a curriculum which may be chosen only by those registered in a curriculum; for example, salesmanship in a commercial curriculum.

"Free Electives" mean that margin of subjects which may be chosen by any pupil in no matter what his curriculum; for example, music or advanced algebra.

The term "Course of Study" is limited to a single subject; for example, course of study in Latin or in algebra.

The term "Pass Mark" is hard to define, but it signifies a line drawn between inferiority and sufficiency; a credit level below which the school cannot recognize work done.

Inglis suggests that approximately two-fifths of the program of studies may be in the core, two-fifths in the curriculum prescriptions and electives, and one-fifth for free electives.

This committee has been in existence too short a time to have accomplished all that it could have wished in preparation for this report. In order to be strictly conventional, we of course drew up a questionnaire,—a cumbersome affair that called for a maximum of thinking and a minimum of writing. We sent it out to a select group

of twenty schoolmen who we know had been giving the question careful consideration.

On the basis of these questionnaire returns, the committee is ready to set forth several standards which now seem satisfactory. It also presents two moot questions, answers to which we are not ready at this time to give.

The following principles relating to graduation are agreed upon by most of those replying to the questionnaires and are approved by all members of the committee present at its meeting Monday, February 27th:

1. Senior High Schools containing grades 10, 11 and 12, should grant the graduation diploma to pupils who have received credit for 12 unit courses or the equivalent, in grades 10, 11 and 12, under conditions specified in paragraph 2. A unit is defined as the equivalent of 120—60-minute recitation hours of work requiring preparation outside of class, with provisions for equating shorter periods or unprepared work on this basis.
2. Of these 12 senior high-school units,
 - (a) Five should be prescribed by subject, viz., a minor of two units of English, a minor of two units of social study, and one unit of health education.
 - (b) Four units should be prescribed for concentration, viz., two minors of two units each, the subjects themselves to be elective.
 - (c) Three units should be free additional electives.
3. For those schools that are still on the four year basis, containing Grades 9 to 12, the graduation diploma should be granted to pupils who have received credit for sixteen units or the equivalent, under conditions specified in paragraph 4.
4. Of the sixteen units completed for the four year high school diploma.
 - (a) Six should be specified as follows: a major of English (3 units), a minor of Social Study (2 units), Health Education (1 unit).
 - (b) Five units should be prescribed for concentration, the subjects themselves to be elective, as follows: a major of three units and a minor of two units. (If a third social study subject should be chosen, making a major

in this field, two elective minors would be satisfactory instead of a major and a minor.)

- (c) Three units should be free additional electives.
 - (d) One unit each of science and mathematic should be prescribed *unless* the seventh and eighth grades have given elementary courses in these subjects.
5. Of the social studies appearing in the prescriptions, the questionnaire conforms with the present practice of prescriptions of half unit courses in civics and economics and in a full unit course of American history. Problems of democracy, sociology and modern history were also named. The committee is not prepared to suggest any change in the courses named; but it is our feeling that the curriculum prescriptions of social study for graduation are to be justified only as the experiences gained from the courses make essential contributions to the interpretation of present and probable future problems that children and adults face, individually and collectively, in human affairs.
6. The questionnaire results indicate much less unanimity for the prescription of a science; about half the replies urge a general science prescription of one-half or a full unit, one-third of the replies indicate a preference for a biology prescription, and one-fourth of the replies do not name a specific science but would require that the candidate for graduation have passed one unit of laboratory science.

The committee recommends that no specific science prescription for graduation be set up at this time, merely stating it as one unit of some laboratory science, which may be omitted if a satisfactory course has been given in the seventh and eighth grades.

7. In regard to mathematics, the replies were divided just half and half, for the prescription of one unit or for no units in mathematics. The propaganda of the various mathematics committees for a more intelligent attitude toward prescriptions in mathematics has borne fruit, in that all the replies that name mathematics, urge one-half or one full unit in general mathematics. A half-unit prescription in bookkeeping is also mentioned.

The committee assumes that the junior high school makes adequate provision for general mathematics, and therefore rec-

ommends that no graduation prescription of mathematics be made by the senior high school, but that in four year high schools, one unit of general mathematics be prescribed, unless the seventh and eighth grades are giving adequate instructions covering the topics set down in the report of the Mathematics Council (Bureau of Education leaflet, Circular No. 6, National Committee on Mathematics Requirement).

8. The questionnaire replies are unanimous in recommending that there be no general graduation prescriptions in foreign languages. The committee so recommends.
9. Of other subjects, a third of those replying would prescribe one half or one full unit in practical arts or home economics, and about as many urge a half unit of chorus-music. Art-drawing, art-appreciation, and public speaking also gained some approval. The committee recommends that these be not included in a prescription for graduation, though any or all may, of course, be required of the pupils as a matter of curriculum practice.
10. The committee recommends that pupils be granted as much as one unit credit a year for the serious study of music, art, or for other serious educative experiences in home-making, office practice, salesmanship, shop work, *if* proper provision can be made for impartial and critical reports on the efforts and success in these extra-school activities, and *if* the school can assure itself of the amount of progress made.
11. In conformity with consensus of opinion as shown by the questionnaire returns, the committee recommends that the high-school diploma, the school's official seal of approval, be granted only to pupils of reasonable mental and moral attainments, who have completed the required amount of school work with at least a pass grade. Colleges should be urged to accept this diploma as evidence of fitness to do such college work as their curriculums qualify them for.
12. A completion certificate should be given to all others who have done what could be expected of them (A. Q. 100), but who have not for any reason been able to "pass" their subjects, or who, for other reasons, the school would be unable to sponsor. It is not recommended that these pupils be in any other way set apart, however. They should be permitted full participation in the graduation ceremonial.

13. A certificate showing the amount and quality of work accomplished should be granted to any pupils who leave school after completing as much as one semester's work.
14. The committee is divided on the value and desirability of the two years' diploma for short curriculums, but it is the prevailing opinion that a special certificate of completion be given rather than a school diploma, to the two year pupils. It is a practical question, not a sentimental or theoretical one. If the graduation after two years constitutes a ceremonial looked forward to by the pupils, if it retains in school pupils who would otherwise drop out, then it should be continued and made as impressive as possible. If, on the other hand, in any community it actually causes pupils to drop out who would otherwise stay to get the four year diploma, the ceremonial may, perhaps, be made as quiet and unimpressive as possible. Speaking for myself and not for the committee, I may say that I am very skeptical of the latter situation.
15. The committee is divided as to the advisability of granting uniform diplomas to all graduates who have fulfilled the requirements; or of granting distinctive diplomas in commercial and in college preparatory curriculums. The majority opinion, however, is that somehow the diplomas *should indicate* what line of work the pupil followed in high school.
16. The committee is divided on the question of credit for quality. We can make no recommendation without much further study.
17. The committee take the position, which is supported by practically all of those who replied to the questionnaire, that the passing grade in all prescribed subjects should not be so high but that every mentally normal child who tries shall be able to pass. Electives may be pitched to a higher key; they may properly eliminate or fail those not adapted by natural ability to the work, but for the core-curriculum to be eliminative, to foredoom to failure any earnest boy or girl admitted to the high school, is thoroughly undemocratic, unjustifiable, and, indeed, vicious in its effects.
18. This brings up the question of what pupils should be admitted. This does not at first sight seem to be within the scope of the work of this committee. But it must be evident, that if core-

subjects are to permit all earnest pupils to pass, the natural capacities of the pupils admitted becomes most important.

The National Commission on Reorganization of Secondary Education urges that pupils in any respect so mature that they can profit from the opportunities of secondary education more than from continuance in elementary education be admitted to the secondary school and provisions be made for them. Here we seem to have a democratic basis, but it is still far from realization. Terman's Study showed that 90 I. Q. is the deadline in practice, and this allows for only one and a half years over-age at 15.

But roughly a third of our potential high-school population have less general intelligence than this minimum. Some of them are institutional cases; some cities have special schools for the mentally handicapped. But there is a considerable margin of children who should be capable of profiting by high-school opportunities, whose mentality is between 70 I. Q. and 90 I. Q. Shall we insist that these pupils "pass" the prescribed courses, or simply that they take them? Repetition by those low I. Q.'s after failure helps almost none at all.

Our committee, like many another, is ready to philosophize in this field, or to point out specific practices of promise, such as homogeneous grouping and the adapting of content and method and passing to pupil needs. But the committee is not ready at this time to lay down a graduation standard for these mentally inferior pupils.

THIRD SESSION

Two hundred and seventy-five sat down to a temperate dinner at 6:15 P. M. in the Ball Room of Hotel La Salle. At the close of the dinner Mr. Willis H. Carothers, Professor of Secondary Education and Principal of Teaching Training High School, Kansas State Normal School of Emporia, Kansas, presided. Professor Elbert K. Fretwell of Columbia University led in "community" singing. The chairman then introduced PRESIDENT LOTUS D. COFFMAN OF THE UNIVERSITY OF MINNESOTA, who read his address on *The High School in Its Relation to the Profession of Teaching*.

THE HIGH SCHOOL IN RELATION TO THE PROFESSION
OF TEACHING

PRESIDENT L. D. COFFMAN

UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINNESOTA

One may as well admit at the outset that there is no real profession of teaching. Those who enter teaching do not remain in it permanently, at least few of them do, and the great majority of them are inadequately trained for their work. If we accept two years beyond a public high school as the minimum amount of training to be required of anyone entering teaching, then only about 140,000 out of the 700,000 persons engaged in public school teaching in the United States measure up to this standard. And if we accept four years of training beyond a public high school as the minimum amount of training to be required of anyone expecting to teach in a high school, we find—and here I regret to say I have not been able to secure the exact figures—that not more than 50,000 measure up to this standard.

The American people are disposed to boast of their democracy and of their faith in the principles of democracy; and yet with an almost unbelievable complacency they leave the instruction of millions of their children as to their duties and responsibilities as citizens, to the youthful, and in a vast majority of the cases, the untutored recruits of the teaching population. About 125,000 new teachers are needed annually. Approximately 30,000 persons teaching this year never went beyond the eighth grade, and some of them were students in the sixth grade last year. Appalling as this is, it is not nearly so significant as is the fact that in round numbers 560,000 teachers fail to measure up to the lowest qualification we would set for one to teach in any school. If all the graduates of all the normal schools and teachers' colleges, public and private, since their first establishment, were alive and well today, ready and willing to accept positions, there would not be enough of them to staff the schools of the United States.

Two years ago we were alarmed over the shortage of teachers. The cry of distress uttered by commissioners of education was echoed in every state and community. Salaries were advanced, the bars were let down and many incompetent recruits were admitted. No one to-day is concerned about the shortage of teachers. Normal schools and teachers' colleges everywhere are crowded with students.

Teaching has suddenly acquired a new respectability. Many have discovered that it is a most attractive calling. There will be teachers and teachers to spare. The problem is not that of finding enough persons to staff the schools, it is that of finding enough competent persons to staff the schools. Unless this be our goal and one that we hold steadfastly in mind, on all occasions, we may expect the salaries of teachers to be reduced. The reduction will take place silently, but nevertheless effectively. The newcomers will be the first to feel the change. Their advancement will be slower and the amount of increase in salary less in the immediate future than it has been for newcomers in the immediate past.

It has been clearly demonstrated in a number of studies that there is a direct relation between the amount of training which the followers of any profession will acquire and the economic return which they enjoy or may expect. States may pass laws increasing the amount of training required of teachers, but unless the economic return warrants a lengthening of the period of training, students will not take the additional training required by law.

But the salaries of teachers and particularly of high-school teachers have been advanced very considerably in recent years. They more nearly approach what they ought to be than at any time in the whole history of public education in this country. They will not remain where they are now unless we are able to secure better high-school instruction, and that means more training for some and an improved professional spirit for all.

One of the factors that has hindered the development of a spirit of professionalism among high-school teachers has been their itineracy. I do not know that they are any more migratory than any other class of teachers, but they at least are notorious for their nomadic life. Before the war enough changes occurred in the typical American high school in three years to equal the total number of persons teaching in the school during any one of those years. Most high-school teachers have seldom remained in a community long enough to vote intelligently for candidates for local offices, or to leave behind them any worthy traditions for intellectual work. They have been a species of intellectual wanderers. One reason why so few high-school teachers have exercised community leadership has been their failure to reside long enough in a community to exercise leadership. From year to year, they have moved on and have been soon forgotten. The salaries paid high-school teachers now should oper-

ate as a check on all this. The tenure of high-school teachers in a given position should be longer in the future than it has been in the past. There should and will be less competition between places of the same relative size. The values that will accrue from greater permanency are obvious to anyone who thinks about the situation.

There are other reasons why the high school will make for the development of a profession of teaching. The high school itself is essentially a true representative of modern education. It is still comparatively young; it reflects to a considerable degree the current changes of social, industrial, economic, and political life. It is experiencing a new definition of aims and a reconstruction of materials. Its advocates think more in terms of civic and social responsibility and less in terms of mere mind training values than they did a generation ago. Talented minds are devising new ways of personalizing the materials of instruction. Every one is considering the forms and types of public service that the high school may render. Thirty years ago nearly ninety per cent of all the students graduating from high school went to college; now, less than forty per cent go. This means that the high school is no longer primarily a preparatory school; it has become an agent of universal education and of community service. It holds a highly respected place in our scheme of training for citizenship; it is the pride of the community in which it is located. Millions are being poured out almost with lavish hand for its support. It offers choice positions and the opportunity for a career. It appeals to men and women with training and with ability. The teachers are working with the youth of the land at the most interesting period of their lives. All of these facts and forces make high-school teaching attractive and give it a stability hereto unknown.

Not only will the tenure of the high-school teachers in a given position or school and their professional life in general be lengthened by the improved salary situation, and not only will high-school teaching be accorded an increased respect and recognition, but high-school teachers will receive more training. Studies of my own have shown there there is a close and high relation between tenure and training. They have also revealed another factor of enormous significance and that is, that there is a high positive correlation between tenure and the amount of professional training teachers receive. Reduce the amount of professional training and tenure is reduced correspondingly; increase the amount of professional training and the tenure is lengthened correspondingly. No matter if the instruction in the

professional subjects is not all that we desire at all times, it somehow or other gets into the consciousness of the students and it makes a vast difference in their attitudes in later life.

Formerly, when we talked about the profession of teaching, we contrasted it with the trades and attempted to define its objectives. All this was worth while. We need to make the teachers see and understand and appreciate occasionally that the laws of teaching will not stay put, that teachers are dealing continually with the mental crises of child life, and that their great service lies in a clear recognition of their social servanthships. The ultimate objectives must be held clearly in mind by those who have caught something of the craft spirit of the calling, but it is too much to ask that they be kept in mind by the newcomer. He must become inoculated with them and our problem as practical minded men and women is to discover and to define the processes of that inoculation.

There are in my opinion just four ways by which the professional spirit among high-school teachers may be developed and cultivated. One of these has already been referred to, and that is the training institution. All high-school teachers should be trained in institutions consciously organized for the training of teachers. This statement means more than it may seem to mean at first thought. It means that the practice we have had in the past of permitting graduates of any four-year college course or university to be certified to teach in a high school must cease. A knowledge of the subject to be taught is fundamental and a necessary pre-requisite to any kind of teaching; but a knowledge of the subject to be taught can be taught by those who are unfriendly to the training of teachers and the attitude of the student thus acquired, instead of being a help actually becomes a hindrance to the development of a professional spirit. For years we have had the professional schools of law, of medicine, of engineering, of dentistry, and of pharmacy in our universities, but it is only recently that education has been given a similar ranking in some of our institutions of higher training. The students who expect to teach must be segregated from the rest of the students, given their special training, assembled for conferences, instructed in the craft spirit and ideals of their profession, exactly as are the students of law or the students of medicine or the students of dentistry. If we expect the high school to be instrumental in the building up of a profession of teaching, one of the first tasks ahead of us is to insist upon the proper training for those who expect to enter

high-school teaching. There is probably no one thing that we can do that will pay larger dividends than this. It has been demonstrated time and again that the materials of education, even though they be poorly taught, express themselves in the idealism of the people to a certain in the first and to a much larger extent in the second generation. If this be true with the instruction of children, it is probably far more true of a group instructed in an environment saturated with the concepts and ideals of the profession which they propose to follow.

There is another factor certainly equally important with that of the training institution, if indeed not more so, in the development of a professional spirit, and that is contact with forceful personalities that are dominated with the right professional ideals. Precept may be important in the formation of character, but dynamic personalities are far more so. There is not a person in this room who, if he had time to think, could not in memory go back to one or two or three teachers who influenced him more than all of the rest. The currents of instruction always set in in the direction of the forceful characters. What a rare privilege it is to study with a truly great teacher, what a privilege to be associated with men and women in the actual work of teaching who sense the dignity of their profession and who think more in terms of opportunity than they do in terms of recognition, who are more interested in the actual achievement and progress of the children than they are in securing a voice in the administration of the schools!

Training and example, knowledge gained in the proper environment under genuinely wholesome personalities—these are forces of paramount importance in the development in the profession of teaching.

But we have many persons engaged in high-school teaching who have finished their college course, what can be done for them? Two things: first, they may be stimulated to attend teacher training institutions during the summer; second, agencies may be set up to provide them with training in service. I shall not take the time to describe the numerous devices that have been created to accomplish these ends. Advancement in rank or class and salary in many cities is now dependent partly upon attendance of some summer school, and partly upon the improvement of the teacher's technique, a mastery of his subject and his interest in everything pertaining to the advance-

ment of education. Some of the very best work done anywhere in America is to be found in the in-service training schemes and plans of some of the larger institutions and cities. It would be worth our time to devote one session to the description of some of these. But it must be admitted that in most cases they apply with less force to high-school teachers than they do to grade school teachers.

That being true, I now come to my fourth and last point—a point which I wish to apply directly to high-school teachers. In my judgment, the development of a professional attitude and spirit among high-school teachers can be best developed at the present time by inducing them to engage in the study of their common problems. Something is accomplished by large state and sectional meetings, by the so-called conferences held at many of the universities, but not nearly so much as can be accomplished by inducing the teachers to work upon many of the high-school problems themselves. I recall a meeting of a group of mathematics teachers in a certain state. They assembled to hear someone speak, but the speaker, a young student of the problems of education, asked them these questions: “What are the reasons for the teaching of algebra? What definite aims do you have in mind? Is it possible for us to list these objectives?” For three days the teachers sat in conference discussing the aims or ends to be attained in the teaching of algebra. Aim after aim was written upon the blackboard and each one was carefully and thoroughly examined. It was found that some of those presented applied equally well to a number of other subjects. Gradually, out of the miscellaneous list those which applied specifically to algebra emerged. Late in the afternoon on the third day the conference adjourned after a definite list had been agreed upon.

Later these same teachers came together again. This time they asked themselves these questions: “How do we know that we are realizing these aims? Is there any way by which we can check and compare our results?” They appointed a committee to consider the matter and it devised a series of twenty-one tests to be given, subject to certain conditions, by the teachers themselves to the pupils who were studying algebra. These tests were given to more than five thousand children in the state. Each teacher sent his results to the committee and a composite report was prepared.

And the teachers assembled for the third time. This time each teacher brought with him the results of the tests in his own school.

He compared them with the results in the composite report. He learned something about his delinquencies and something about his strengths. Some new questions were raised. It was clear that certain others were not. This naturally led to inquiry. Wide variation in results led to a discussion of the methods of instruction. One teacher said, "I teach imaginary quantities this way;" another said, "I use a different method." The various methods in teaching and the aims that were not being realized, were listed and then the question was asked, "Is it possible for us to make an intelligent study of the methods of teaching relating to these aims?" Ways were worked out for doing this and the teachers returned home to continue their comparative investigation.

The value of this investigation cannot be overestimated. Not only did these teachers now know more about algebra because of it—they became better teachers. They discovered the problems of aims and technique are as fundamental as the problems of subject matter. Long before they had found the answer to their third question, certain of the more gifted minds had pushed far in advance and were already at work upon texts and material in general mathematics.

I cite this particular case because it is the type of work that should be carried on with every group. High-school teachers should be induced to work upon problems which are common to high-school teachers, as well as upon problems which are common to the teachers of the special subjects. We cannot expect a profession of teaching unless we can build up an interest in the things that teachers teach.

In the early nineties a young student at Clark University found that most of the students' dislikes for certain subjects of study correspond to the teacher's dislikes for those same subjects of study and that the most of the students' likes for certain subjects of study correspond to the teachers' likes for these same subjects of study. That being true, it is easy to prescribe for teachers who are teaching subjects they do not like. They should act toward the subjects as if they liked them. Acting toward a subject as if one liked it does not mean that he is practicing hypocrisy, if he really wants to like it. Wanting to like a subject means that there should come a time when one has a certain sense of mastery over it, when he can think in terms of it, when he has dreams about it, when he is absorbed by it. The emotional attitude which one has for the thing he is doing transfers across and finds expression in the life and conduct of the

students far more quickly than does one's cold and unfeelingly intellectual attitudes.

Teachers must become enthusiastic about their work, at times they should grow eloquent over it, and they must join with each other in groups to work upon their common problems. A mutuality of understanding and sympathetic co-operation in studying all sorts of questions relating to every phase of high-school education will do more than all other things combined just now to build up the profession of teaching.

Professionalism is not something to be transmitted; it is something to be achieved; it is not something that can be taught; it is something that must be earned. It is the by-product of faithfulness and devotion to one's life work. A position becomes a career only when one appreciates the opportunities for personal growth and public service which it affords. A group becomes professionally minded only when it is bound together by common interests and common ties that reach beyond the personal welfare of its members to the contribution which they make to their day and generation.

Whether these highly desirable ends are to be attained in the high-school field will rest largely with the leadership in that field. The task, although I would much prefer to call it the opportunity *par excellence*, belongs to the high-school principals. Let the contagion of your enthusiasm spread to your teachers, infect your corps with an ambition to find better ways of doing things, urge your teachers to visit gifted teachers and stimulate them to work co-operatively with others so that they are not mere listeners but contributors to the science and art of education.

This address was followed by some interpretative dancing by girls from J. Sterling Morton High School, Cicero, Illinois. The dances were:

- a. "Suite of Five Waltzes."
 - b. "Sylvan Scene."
 - c. "Troicka."
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DR. THOMAS H. BRIGGS, DIRECTOR OF THE DEPARTMENT OF SECONDARY EDUCATION OF TEACHERS' COLLEGE, COLUMBIA UNIVERSITY, read the following paper:

WHAT NEXT IN SECONDARY EDUCATION?

THOMAS H. BRIGGS,
TEACHERS' COLLEGE, COLUMBIA UNIVERSITY

When the new history of education is written there will be no more marvelous chapter than that which records the expansion of secondary education in the United States during the past generation. Although all of us know that the number of high schools has multiplied until every village offers some combination of higher studies and that the time is in sight when all the children of all the people will persist beyond the elementary grades, we are too close to the development, too much involved in it for full appreciation. Very properly we have pride in the buildings and equipment that the public has supplied, in the standardization achieved, in enriched and liberalized courses, in the understanding with higher institutions and the stalwart sense of responsible independence that permit of offerings impossible a decade ago, in the beginnings of scientific study of our problems, in the increased professionalization of our teachers and principals, and in improved plans of training for better service.

The time has now come for a stock-taking, for a justification of what we have done, and for a clarification of aims that may insure further wise and economical progress. A desire by parents that their children may have an "opportunity," however indefinitely that may have been conceived, public pride, and a beautiful even if often a blind belief in education, have so far furnished a support which, in comparison with that given the elementary schools, may be termed liberal; but as mounting costs of other public obligations more vigorously compete with those of education, we may expect, especially from adults who in varying degrees have found disappointment in their own high school courses, a challenge for us to justify increased or even continued public support. But whether coming with hostility from without or with sympathy from within, an enquiry of success should be made.

To what extent have we succeeded in achieving the declared aims of our courses?

Before attempting even a partial answer to this question, let us be clear as to why we ask it. In the first place we seek neither to **indict and convict individuals** nor to palliate and praise. As leaders in the momentous movement, trained dispassionately to consider all pertinent facts whether favorable or unfavorable, yet need and desire

to pause now and then for a consideration of accomplishments in order that you may decide wisely as to the continuance or modification of present practices. Whatever answers we find should direct our minds forward to the formulation of new and more assuredly profitable plans.

Without in any way detracting from a justifiable pride in our achievements, let us frankly recognize that by and large we have failed to achieve with anything like a majority of pupils the declared aims of the courses of study. Of those pupils who are permitted or required to take a foreign language, from one-half to three-fourths drop the subject before they have had time enough to secure any appreciable degree of permanent possession. Although the avowed primary aim of one branch of our English departments is to inculcate a love of good literature, the majority even of our graduates apparently prefer the *Saturday Evening Post* to the *Atlantic Monthly*, Robert W. Chambers to John Galsworthy, Berton Braley to E. A. Robinson, and the "movies" to all else. We have taught history without developing in the majority of pupils the attitude of mind which we were assured would make impassionate and fair-minded students of national and international affairs. We have required at least one year of abstract mathematics without stimulating the majority of pupils to elect advanced courses in the subject where they might find opportunities for applying their acquired knowledge and skill. And so on through the list. For the sake of assured clarity, may I not emphasize what I have in each of the preceding sentences stated—that we have failed of our larger purposes not wholly but with a *majority* of the pupils whom we have permitted or required to take the subjects of the conventional curricula.

All objective measures confirm this indictment; even more, they strengthen it. Of the pupils who have studied Latin for a year and a half, only three or four can give the complete conjugational classification of *est*, and one of the three can translate *Hoc facto, pueri discesserunt*. After two years of French fewer than half the pupils can tell the meaning of *J'ai dû partir sans vous attendre*. In literature three-tenths of seniors prefer a sentimental or unmetrical version to Tennyson's original Bugle Song. About one pupil of two can define the Monroe doctrine or tell for what Solon was noted. And fewer than half the pupils who have studied algebra for nine months are able to compute the area of a circle when given the formula $a = \pi r^2$ and told that π equals $3\frac{1}{7}$ and r is seven feet. These data,

taken from reports of standardized tests concern for the most part concrete factual subject-matter; they do not make it probable that claims for larger and more abstract values are well founded.

The failure lies not primarily in the knowledge and skill of the teachers, not in the seriousness of their effort, nor in the fidelity of their service. The failure lies rather in the indefiniteness of general purposes of secondary education, in the consequent unbased aims of subject-matter courses, in the lack of adaptation to economic, political, and social changes, especially those in the personnel of the pupil population of the high schools, and in the incomplete acceptance in practice of proved educational theory.

The nature of the changes in modern life, indicated in the early pages of *The Cardinal Principles of Secondary Education*, and their implication for the high school, can not at this time be discussed, nor is it necessary to present and support what current theory now holds regarding general transfer, discipline, interest, original nature, and individual differences. The tremendous increase in the enrollment of secondary schools has without question increased the range and lowered the average of academic ability. What should be the responsibility of the schools can be ascertained only by reference to general principles—soundly based, clearly enunciated, and constantly directive to more effective practice. It is well within the truth to say that a large part of our high-school program is based on compromise rather than on such principles. If disturbed by the perpetuation of traditional practices, even when external changes are recognized, we should be still more disturbed by unguided and irresponsibly proposed new programs.

Having briefly recognized that there are important environmental changes, let us next consider such principles as may guide attempts toward redirection and improvements. The three fundamental questions that will lead to a statement of principles are: 1. What is the justification of free public education? 2. What is the aim of secondary schools? And 3. What guides are there for the making of new programs? On every one who hopes to contribute materially to the improvement of secondary education it is incumbent to have clear answers to these questions, answers which will be directive in the solution of the thousand and one problems that rise in the construction and administration of a constantly adapted program. Verbal acceptance of proposed answers is of course insufficient. The

appeal is to those who are clear sighted, courageous, impatient or sham, and eager for hard work.

The only justification for free public education is that thereby the State intends to perpetuate itself and to promote its own interests. Free public education thus conceived is a wise investment, not a generous gratuity. Acceptance of it carries the obligation to devise plans that will contribute to the perpetuation and promotion of society; *per contra*, it also carries the obligation for intelligent and honest agents of the State to refuse to continue any practice, however detailed, unless it has a reasonable promise of returning profit on the investment. In the past we have often contented ourselves by believing that a proposed objective was in some general way "good"; more and more in the future we shall be compelled, primarily by honesty of stewardship, to show not only that an objective is of immediate or ultimate good for the supporting State but also that it is reasonably attained by the pupils whom we have permitted, advised, or required to seek it.

In an effort to apply this principle there will inevitably arise the question of relative values. The surest guide as to what is of most ultimate worth to the State through the growth of the individual is common sense. Of course in many matters there will be differences of judgment; but if common sense refers constantly to the proposed guiding principle it is likely to have little hesitation in deciding between French and the patois of the South Seas, between health habits and the location of the olivary bodies, between the marital adventures of Henry VIII and Magna Charta, or between The Idyls of the King and hendiadys or epizeuxis. These are extreme alternatives, but no more so than scores between which we are called on to decide.

It would be sophistry to give verbal acceptance to this principle and then ignore it in practice. This is no time for sophistry. The principle must be applied both negatively and positively, both for eliminating subject-matter of relative worthlessness and for including new topics that are of obvious value for the pupils preparing for modern life. There is in it no iconoclasm. The substantial values of the oldest program can maintain themselves against trivial aspirants for their place. We propose merely a conscious stimulant to natural evolution that the fittest way be found and that it may survive through the sons and daughters of this generation.

If any one doubt that this is a cogent criterion, let him spend one hour in seriously applying it to the details of any field of study

in his school, whether they be in the traditional course or not. If of the competing details one promises the largest contribution to the State through the growth of the individual, it is justified. If by this criterion it promises little or nothing, how can it be continued at the expense of those who have entered into a contract for the maintenance of their life and the increase of their happiness? Without such approval there is loss to the State not only in its investment, but also in the integrity of those chosen as agents of the State to be the leaders of youth.

This basis of free public education being granted, we come to the second major question,—what is the aim of the secondary school? The answer proposed is this: To fit each person to contribute better to the State. In our democracy it has generally been accepted in theory that if each individual is developed according to his peculiar aptitudes the State will on the whole gain the maximum of advantage; but this principle, for reasons that do not here concern us, has never found anything like general adoption in practice. Even as the population of our high schools multiplied and manifested immutable innate differences we have too often persisted in the futile effort to fit them all alike for abstract generalized thought and dignified leisure.

Acceptance of the proposed principle means that beyond the minimum of education necessary for all normal citizens in a democracy, a minimum that can easily be provided in the six-year elementary school, each individual should be developed according to his interests, aptitudes, capacities, and abilities, whatever they may be, and to the extent of his power of assimilation. If fully directive, this principle would give us at the end of adolescence citizens all trained for health, home membership, the wise use of leisure, et cetera, but each specialized and advanced according to the factors mentioned. Increasing differentiation with retention and successful accomplishment is the ideal response of the high school.

Current liberal practice tends toward this ideal; but in abandoning the older program of one curriculum leading to a single type of objectives, the newer should beware of the social failure that results when accomplishments are accepted as satisfactory though far below the possibilities of individuals gifted in any of several respects. It is not proposed to lower the standards, but rather to adjust them both in kind and in degree so that each pupil by his optimum exertion

may be most successful for himself and for the State. To each according to his needs; from each according to his powers!

It can hardly be questioned that all the commonly used mental tests measure chiefly the academic and abstract phases of intelligence, largely neglecting other phases which are found highly useful in preserving life and promoting happiness. But even with this limitation, we are told that no pupil with an intelligence quotient of less than .90, when measured by such tests, can expect to graduate from a high school of ordinarily good standards. This means that the high school is excluding from its privileges not only practically all of the future workers with simple tools and materials, three-fourths of the future workers requiring considerable skill (such as carpenters, machinists, and butchers), and half of the future workers requiring high-grade skill and knowledge, but also a fourth of those who in the past have become our workers with symbols and ideas.

Terman has recently presented* a report of an unusually extensive survey of the mentality of a young man who after five years in a conventional high school was certified to college though he had a mental age of only 12.5 years. This youth's responses to the test questions fill a reader with surprise, chagrin, pity, amusement, or concern according to the point of view from which they are considered, and yet he is representative of a considerable fraction of our adult population. In the words of Terman, "his intelligence is probably not equaled or exceeded by more than 70 per cent of our white voters, by more than 50 to 60 per cent of semi-skilled laborers, . . . by more than 30 to 40 per cent of our South Italian, or by more than 20 to 30 per cent of our Mexican immigrants. Compared to the average American Negro, K is intellectually gifted, being equaled by probably not more than 10 to 15 per cent of that race."

At the other end of the scale are pupils with natural endowments far above those of their less fortunate fellows. Measurements show that they have the ability to become successful in such professions as law, medicine, or engineering, and even to develop into intellectual leaders in such fields as they elect for specialization. These youth can master more difficult tasks, learn faster, retain longer, and apply theory better than nine-tenths of the pupils with whom they completed the elementary grades.

In a democracy education can not be refused to youth with an

*Scientific Monthly, 14:24-40.

intelligence quotient of .90 or less, thousands of whom are each year essaying in high schools tasks which are by no means suited to their capacities or promising of returns on the cost. Neither can abstract and general education be refused to the gifted, or the progress of civilization will be hampered. Where, then, shall we find a solution of the problem of educating heterogeneous adolescence? The answer follows inevitably: in the principles already presented. Education being an investment of the State must provide a training suitable to the interests, the aptitudes, the capacities, the abilities, and the most probable needs of every normal individual, however low and however high his natural intelligence. Just as truly as a manufacturing plant, it must work up all its raw material so as to make it maximally useful.

The difficulties in the way are by no means few or easily superable. Full acceptance of the principles would inevitably increase the costs of schools, at a time, too, when every community is seeking means of economy. But there is no true economy in continuing a type of education which fails to retain all adolescent youth, to seek with them suitably varied objectives, and to achieve in any satisfactory degree those proposed. Besides the increase in costs it will be objected that lacking omniscience we can not with inevitable justice assign each pupil to work entirely suited to him. True enough. But there is vast difference between pursuing a policy that is proved ineffective for all but a small minority of even those retained in the schools and whole heartedly making the attempt to ascertain and provide for varied needs. Intelligence and aptitude tests with the proper kind of junior high-school exploratory courses will go far toward making possible proper classifications.

But there is no place in this limited paper for full consideration or even for a complete enumeration of either the obstacles to be overcome or of the constructive details of procedure. It is possible merely to present principles that seem to be fundamental, to clarify and briefly to argue for them, in the hope that the administrative leaders of secondary education, being made more conscious of its fundamental justification, purpose, and obligation, will courageously continue their efforts toward adapting the American high school for the attainment of its high aim.

Perhaps more than any other class, schoolmen are tolerant of criticism, even long-suffering under argument or proof that they have accomplished less than they ought, that they have been uneco-

nomical, or that they have turned out a product for which there is small market. They have a right to demand of their critics support for a new program and guides for its formulation. In an attempt to satisfy the latter part of this reasonable demand, I shall present three principles, each of which is believed to be sound, easily understood rather than mystifyingly impressive, stimulating without restriction, and above all helpful in answering the questions involved in the reorganization of the secondary school and in the selection of new material of instruction. It is recognized that no formula can satisfy all thinkers; but as no one can do independent work without basic guides to which he constantly refers, it is incumbent on each progressive spirited leader either to accept the principles to be proposed or else to formulate others more satisfactory to him.

The first guiding principle proposed is this: The primary purpose of the school is to teach its pupils to do better the desirable things that they are most likely to do anyway.

This simply stated principle is far-reaching in its effects. Acceptance of it obligates one first of all to make an inventory of the desirable activities pursued by the boys and girls in school and by such men and women as they are most likely to develop into. One who seeks a stimulating and profitable problem can do no better than using this principle to formulate a program of what he should like to do in his school if he had no restrictions of traditions, of intrinsic requirements, or of financial support. Most progress can probably be made at present through the subject departments as organized, the items in each being classified under the seven main objectives of fundamental processes, health, home membership, wise use of leisure, civic responsibilities, vocations, and ethical character. It is more wholesome to pursue this line of work positively than negatively. Especially during the past decade secondary-school principals and teachers have been made exceedingly sceptical about the worth of all or nearly all of the subjects normally taught. Observation rather than pessimism notes that the scepticism has been more readily accepted than the obligation to replace items of small or no worth by others convincingly good.

The tendency of makers of courses of study, including the writers of text-books, is toward the application of this principle. An attempt to apply it somewhat exhaustively is exemplified by Bobbitt*

*School Review, 28:738-749.

in his excellent partial analysis of the facts concerning health. The principle is presented here that it may be consciously recognized. Its application can never be complete, but the humblest teacher in the smallest school may go far toward improving his work if at every step he asks, "What desirable things in my field are these pupils likely to do whether they are instructed further or not? and How can I help them to do these things better?"

However fully this important principle is applied, to insure progress it is necessary to supplement it with another. Consequently this second principle is proposed: Another duty of the school is to reveal higher types of activity, and to make these both desired and to an extent possible.

The first part of this principle the secondary schools have very generally accepted. Their programs are to a large extent filled with material that attempts to reveal higher types of mathematics, of science, of literature, and of other subjects. Whether these higher types are the most desirable and the most possible or not it is unnecessary here to discuss. The second part of the principle the schools have neither generally achieved nor generally accepted. If it is wise to lead pupils to see higher types of mental, aesthetic, or manual activity, it is also necessary and economical to teach them to desire more and to have some degree of the power of attainment. Failure in this respect is evidenced in the frequent dislike that pupils have of what they have studied in the schools and the complacent satisfaction betrayed by the frequently heard remark, "I had that in school, but it's all gone now. I haven't thought of it since." The road is strewn with discarded shells of half learned foreign languages, mathematical formulae, and isolated facts of history, each tragically suggestive of something not supplied but now needed for full and useful living. Any industry not supported by the abundance of the total State would with such a scrap heap have long ago confessed its insolvency and its stockholders would have sought another means of realizing profit from their major investment. Let us justify the industry over which we have charge by not only revealing higher types of activity but also by sending our pupils out with a vision, with some degree of power, and with eagerness for more of the better things of life.

The third and last of these guiding principles is this: So far as possible every subject should be organized so that it is valuable to the extent to which it is pursued.

If the secondary school were assured of its pupils for any

definite length of time, there would be some justification for a large amount of deferred values, though in any case we know the stifling effect of meaningless work on the intelligent effort of pupils. But we are not assured of our pupils for a full course, a full year, or even a full term; they leave at what time and at what point in a course they and their parents elect, and when they leave they abandon useless foundations futilely laid for structures that will never be erected. For this waste both the individual and the State pay—and lose. Probably the majority of the pupils who drop out could remain longer if they really wished to do so. The secondary school is still a selective institution as Counts has recently shown, though tremendously expensive for that purpose, but we must not forget O'Brien's proof that most pupils leave representative high schools for reasons other than inability to do the work required. Doubtless courses of convincing worth would hold them longer, but if the proposed principle were applied in practice, at whatever point pupils dropped out they would be just so much better prepared to make their contribution to society.

One large and highly specialized school that I recently studied had for all its pupils a single curriculum, at least four-fifths of which was relatively valueless if its pupils did not finish its course and, in addition, pursue advanced work of the same kind. Of every hundred entrants twenty-four graduated and only twelve entered colleges. What should one say of an industry that scrapped at least nine-tenths of the material that it accepted for development—all of the material good for something, indeed the best material that the stockholders could provide? This is an extreme case, to be sure; but the same principle is involved if the waste is only one in ten instead of nine times as large. The investment of education requires more economy and efficiency than does any investment of mechanical production in proportion as its raw material is more valuable and the stamp of its effect more immutable.

This principle is revolutionary as regards certain subjects now in the curriculum, the subjects, it may be noted, that have been most under the fire of criticism in recent years. But that it is not an impossible ideal has been long shown in certain phases of physical education, literature, composition, music, general science, and civics. We believe that a pupil pursuing subjects for one year, one month, one week, or one day should acquire just so much benefit and the State just so much profit; double the time and there should be double

the benefit and double the profit. Any subject that can not be reorganized so as to be largely of worth to the extent taken should be deferred until the future of pupils electing it is known with a minimum of error.

In retrospect this paper may be interpreted by some as an argument for the lowering of standards, for adapting the secondary schools to the capacities of the least capable of our youth. Let me assure you that no interpretation could be more erroneous. The public school is a public investment. To insure social economy and the maximum profit it must provide for returning to society all of its youth made better for the richest life possible to each. The adaptation of means to individuals will result in lower standards for some, it is true, but in higher standards for others, who unincumbered with fellows unable and unfit to follow this particular path can make even faster and more assured progress.

What is next in secondary education will be determined by you men and women and others whom you represent, principals of high schools in the United States. The effectiveness of your efforts will depend on the clearness with which you see the goal, on the soundness of the guides that you accept, on the consistency and courage with which you use them, and on the independence that you manifest in making progress when you are sure that your road leads to the desired end. When courage, industry, and fidelity are equaled by clear vision, conviction, and guided independence there will be no limit to the contribution that you may make through the secondary schools to the happiness and prosperity of our nation. We are now in a period with more possibilities for progressive change, with more opportunities for good, with more probability of success than that turbulent time of which Wordsworth wrote:

"Bliss was it then to be alive; to be young
Was very heaven."

Those who are alive, I congratulate. Those who are young, I envy.

FOURTH SESSION

The fourth session of the Association was called to order at 2:25 P. M. in the Ball Room of Hotel La Salle by President Prunty. He called upon Mr. Edwin L. Miller, Principal of Northwestern High School, Detroit, Michigan, Chairman of the Committee on Secondary-School Curricula, to preside for the report of this com-

mittee. He introduced Mr. Clarence D. Kingsley, State Supervisor of High Schools of Massachusetts, who talked to the report of the committee. MR. RALEIGH SHORLING OF LINCOLN SCHOOL, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, spoke on *Mathematics in the Reorganized Secondary School*.

MATHEMATICS IN THE REORGANIZED SCHOOL

RALEIGH SCHORLING,

THE LINCOLN SCHOOL OF TEACHERS' COLLEGE

Second-handed and Misfit Goods. Some of the previous speakers have emphasized the need for the school man to assume the "selling" attitude toward his public. This may well have a depressing effect on those who are conscious that the public has frequently paid heavily for second-hand and misfit educational goods. In particular we are aware that the standard algebra course has been a "hand down" from the time when it was first taught to the seniors at Harvard to the present ninth grade position. There is a real danger that the junior high-school movement may cause it to be taught without substantial reorganization a year or two earlier. The evidence that algebra as taught is a misfit will not be presented here. It is no longer customary or helpful to open an educational discussion by an attack on high-school mathematics. We are definitely, it seems, in the stage of improvement.

Practice Moves Forward Slowly. The simple chart^a at the right aims to show the relations that exist among certain factors that operate in the teaching of high-school mathematics. The three items shown are practice, information, and theory. It is, of course, not possible or necessary that these factors shall be accurately located. But their relative position is not debatable. There is a wide gap between what we do and what we might do if we used available information, and in general, theory runs ahead not only of practice but of knowledge. It is possible to find school officials who vote enthusiastic assent to progressive mathematics programs. But if you visit their schools, you will find them still teaching a standard ninth grade course in algebra, which is in theory and symbolism substantially what it was in the seventeenth century, and of which fully 70% has been

a. A chart was on the wall showing the relation between practice, available information, and theory.

shown to be manipulation of symbolism and drills on non-essentials set up fifty years ago. You will also find that they still give their tenth grade pupils an ice cold plunge into plane geometry without preliminary preparation. They seem to have forgotten that geometry was originally designed for and by adult philosophers. They do not know that plane geometry as taught involves at least five major psychological difficulties, namely vocabulary, symbolism, perception of new concepts, acquisition of a technique of thinking, and a special organization of written and oral expression. Nor do they realize that three of these psychological difficulties may be removed if children are given the opportunity to learn the concepts and principles of geometry as they learn other meanings,—through abundant, varied and purposeful experience in the two or three years that precede a formal course.

Since there is this wide gap between practice and information, it seems important that the school executive be familiar with the material now available for moving practice forward. It is my purpose to discuss some of the forces that have been operating recently on the factors shown in the sketch so as to improve the teaching of high-school mathematics.

Important Books and Reports in Secondary Education. From the point of view of theory, we have made considerable advance by the publication of books written by Inglis, Briggs, and Koos, and by such pamphlets as are represented by "Cardinal Principals of Secondary Education" and the mathematics report of the N. E. A. Commission on the Reorganization of Secondary Education. (Bureau of Education Bulletin, 1920, No. 1.) The N. E. A. report, commonly known as the Kingsley or Kilpatrick report, though it received but little discussion, was nevertheless very effective because it served as the percussion cap. It produced action in the camp of conservative mathematics leaders.

Principles of Secondary Education are Finding Acceptance by Mathematics Teachers. These books and reports have served to clear up our principles of secondary education, and stimulated mathematics teachers to reorganize the work in mathematics so that it may do its part of the general program. It is now possible to state certain principles of secondary education whose special applications in the field of mathematics are gaining widespread acceptance. For example, the opening paragraph of the curriculum report before us defines the aim of secondary education as follows: "The aim of edu-

cation is the development of the individual pupil in such a way that, both during his school career and his later life while himself enjoying the fullest possible measure of happiness he shall contribute according to his full ability to the happiness of others." When translated into English, as it was many years ago, this definition seems to say that the high school exists that all its pupils may "have life . . . and have it more abundantly." In short secondary education is being defined in terms of *satisfactions*. Applied to mathematics it means that in and out of school life must begin to mean more to a boy or girl just because he or she is in a mathematics class. Preparation for later courses and for life are no longer sufficiently worthy objectives. The appeal must be here and now. A preliminary valid test of mathematics is the contribution which it makes toward intelligence in other school subjects. We find this principle clearly accepted in the preliminary report of the National Committee on Mathematical Requirements when it is asserted that: The courses in each year should be, so planned as to give the pupil the most valuable mathematical information and training which he is capable of receiving in that year with little reference to the courses which he may or may not take in succeeding years."

The wide acceptance of this principle has placed the emphasis upon the tools of the subject and upon the understanding and appreciation of what mathematics has done and is doing for the development of civilization.

General Mathematics. A second principle of the curriculum report before us asserts "general survey courses in any subject must precede intensive work in that subject in order that its life significance may be made clear to pupils." This principle, too, is gaining widespread acceptance by mathematics teachers, the direct cause being the extraordinary increase in pupil population. In my life time, the population of this country has not doubled, but the high school enrollment has been multiplied by five. In New York City we have over 16,000 new pupils in the high schools this semester. The increase in the ratio of pupils to be educated means that our pupils are no longer so highly selected as they were a few generations ago. Experience with our general intelligence tests suggests that the level of innate ability is lowered as the numbers increase. This factor is important, especially to those who shape the materials for the basic exploratory courses. If we are to have a universal, liberalized education at least to the extent of nine grades, it follows

that the materials must be organized so that children may get the maximum good to the extent to which the courses are pursued. The acceptance of this principle demands that the materials of instruction in the introductory courses be "geared" lower. The important relationships of science, mathematics, history and the like need to be pulled forward and given a treatment so simple that a greater number may be able to understand and appreciate them.

Mathematics Unnecessarily Difficult. Mathematics furnishes an excellent illustration of materials that have been organized so as to be unnecessarily difficult. There certainly are different ways of organizing material so as to represent varying degrees of difficulty. If we were to image a psychological ladder in which the rungs or rounds represent the degrees of difficulty in learning, I fancy that we should find something like the following: The lowest rung would probably be the relationships that people have with one another. For example, it does not take very much intelligence to be a satisfactory neighbor or a faithful member of a fraternity or club. Most people have more or less satisfactory personal relationships so it cannot involve difficult thinking. Somewhat higher in the scale, we would find taking care of animals and things. A little child early is able to do this type of thinking. Then, too, in our army camps we learned that both horses and men were better satisfied when the task of taking care of the horses was not assigned to college graduates. Perhaps the next rung is an analysis of motion. If an object in a show-window moves it is sure to collect a crowd and not all look intelligent. The Army Alpha Test revealed that chauffeurs as a group ranked low in the scale. Somewhat higher, but still very low on the ladder, we would find the graphic side of life. Newspapers, magazines and trade journals are rapidly learning that their material can be presented more effectively if it includes a graphical illustration. In New York City a shrewd newspaper man has capitalized this idea. Not all (perhaps I should say not many) of us who ride in the subway in New York City can read, but we nevertheless desire to experience the daily thrill of the most recent movie star scandal. To meet this need, we have a newspaper which presents the current events largely in a pictorial form. In a very short time, this newspaper acquired a very large circulation and it was a powerful factor in the recent election. Next in the scale, we would find ideas and principles derived from observed data. Possibly we are now dealing with the relationships of economics, history and the other social

sciences. On a still higher rundle is that of the manipulation of principles or logical arrangement, as, for example, *demonstrative geometry*. And very high in the scale, we find symbolism and the manipulation of symbolism, *abstract algebra* and *formal logic*. Thus, we see that secondary school mathematics has been operating almost wholly on the upper rundles of the ladder of difficulty in thinking. A prominent psychologist estimates that one of our best algebra texts is written so that only one out of twenty of the new school population can grasp its meaning. Children can learn to do these manipulatory steps without gaining the meanings. It is still possible to visit schools (and some here would not need to go far) and see pupils—whole classes, go to the blackboard hour after hour throughout the day and find not one problem that anyone has ever an occasion to solve. The problem of “gearing” our mathematics lower in the introductory causes has always been with us but never so urgent as now, when the masses are crowding into the schools.

The Old and the New in Contrast. A typical problem which one would find ninth grade pupils engaged upon in an inventory such as is described above is: “Divide $-7x^3-10x^2+x^4-5+2$ by $-x+x^2-3$.” The country is spending enormous sums in teaching useless material of this kind.

In contrast let us look at the following: “I wonder how tall that old elm is,” said John to Harry as they were coming to school. Harry said, “I guess it is about 100 feet. Its shadow looks 20 times as long as my 5-foot shadow.” John said he didn’t think shadows had anything to do with the height of trees. He suggested that they stop and measure the tree with a 50-foot cotton tape line which they had been using to measure broad jumping. But Harry gave several reasons why it would not be practical to climb the elm and find its height with a tape. What do you think he said? That evening Uncle Henry, an engineer, told the boys that some of the best measurements of lines are made without ever laying a scale, like a ruler, yard stick or tape line, to the object. The next week the boys found out for themselves that the tree was 89.9 (nearly 90 ft.) high. How do you think they did it? The second problem involves fundamental mathematical principles and sweeps across a wide range of human thinking from the easy to the more difficult steps. It starts in a social situation, moves rapidly to the use of a graphic sketch and later demands a generalization, the equation and the formula. The problem uses symbolism in a way that is serviceable and meaningful. A gen-

eral basic course with the thinking "geared" lower as in this problem is not only desirable but feasible.

Valuable Materials. It is necessary to turn now to the second factor on our chart to see what forces have moved it forward. The last ten years have brought about gratifying advances. The most important instrument for mobilizing the thought on this problem has been the National Committee on Mathematical Requirements. The Committee was unique in that (1) it represented nearly 100 co-operating organizations. Of these many did careful and extended work on the preliminary reports; (2) it commanded the full time service for over two years of two able men, Professor J. W. Young and Mr. J. A. Foberg; (3) it has been adequately financed, having nearly \$55,000 at its disposal; (4) it recognized that committee work that would eventuate must be prefaced and supplemented by carefully made inventories of the experience that bears upon the problem studied. The investigations and recommendations included in the Summary Report to be published presently by the Bureau of Education and the Final Report to be published by the Committee will constitute two volumes of major significance to teachers and school executives. The Final Report will be a volume of approximately 500 pages. Copies of both reports will be distributed free during this school year to high school libraries and interested mathematics teachers. It will then be possible for principals, supervisors and teachers to confer and determine to what extent the local course of study needs revision in the light of these recent investigations. The necessary material is under one cover. This will probably be welcomed by principals for the amount of material appearing which relates to the high school makes it difficult to keep the curriculum up to date. It seems necessary that all the major subjects issue similar reports from time to time or else we may need to develop a new high school official, namely, a special *curriculum principal*. Under current practice, the most important phases of the high school (those dealing with the curriculum) are often neglected. The materials listed above for mathematics make it unnecessary that this be true in that field.

Minimum Essentials. Besides reporting important investigations, the Final Report will contain recommendations for the senior high school (grades ten, eleven and twelve) for the standard four-year course and for the junior high school (grades seven, eight and nine). It is assumed that the required material (the "core") is of

particular interest to this group. The following list of facts, principles, processes, and topics of arithmetic, geometry, algebra and trigonometry constitutes the material which the committee recommends as the "core" material for grades seven, eight and nine.

A. Arithmetic:

- (a) The fundamental operations of arithmetic.
- (b) Tables of weights and measures in general practical use.
- (c) Emphasis on simple fractions: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{1}{5}$, $\frac{1}{8}$.
Fractions other than these to have less attention.
- (d) Facility and accuracy in the four fundamental operations; time tests, taking care to avoid subordinating the teaching to the tests, or to use the tests as measures of the teacher's efficiency.
- (e) Very simple short cuts in multiplication and division (such as replacing multiplication by 25 by multiplying by 100 and dividing by 4).
- (f) Percentage. Interchanging common fractions and per cents, finding any per cent of a number, finding what per cent one number is of another, finding a number when a certain per cent of it is known; such applications of percentage as come within the student's experience.
- (g) Line, bar, and circle graphs to be used wherever they can be used to advantage; these not to be taught as a separate topic.
- (h) Arithmetic of the home: Household accounts, thrift, simple bookkeeping, methods of sending money, parcel post.
Arithmetic of the community: Property and personal insurance.
Arithmetic of civic life. Taxes.
Arithmetic of banking: Savings accounts, checking accounts, foreign money.
Arithmetic of investment: Real estate, elementary notions of stocks and bonds, postal savings.
- (i) Statistics. Fundamental concepts; statistical tables and graphs; pictograms; simple frequency distributions; measures of central tendency.

B. Intuitive Geometry:

- (a) The direct measurement of distances and angles by means of a linear scale and protractor. The approximate character of measurement. The degree of precision as expressed by the number of significant figures.
- (b) Indirect measurement by means of drawings to scale. Uses of square ruled paper.
- (c) Areas of the square, rectangle, parallelogram, triangle and trapezoid; circumference and area of a circle; surfaces and volumes of solids of corresponding importance.
- (d) Practice in numerical computation with due regard to the relation between the precision of the data and the significant figures in the result.
- (e) Simple geometric constructions with ruler and compasses, T-square and triangle, such as perpendicular bisector, angle bisector, parallel lines, etc.
- (f) Familiarity with such forms as the equilateral triangle, the 30° - 60° right triangle, and the isosceles right triangle; symmetry, axial and central; a knowledge of such facts as those concerning the angle sum for the triangle and the Pythagorean relation; simple cases of geometric loci in the plane and in space.
- (g) Geometry of appreciation: Geometrical forms in nature, architecture, manufacture, and industry.

The work in intuitive geometry should make the pupil familiar with the elementary ideas concerning geometric forms in the plane and in space with respect to shape, size, and position. It should, moreover, be carefully planned so as to bring out geometric relations and logical connections. Before the end of this intuitive work the pupil should have very definitely begun to make inferences and draw valid conclusions from the relations discovered. In other words, this informal work in geometry should be so organized as to make it a gradual approach to, and provide a foundation for, the subsequent work in formal demonstrative geometry.

C. Algebra:

- 1. The formula—its construction, meaning, and use—
 - (a) As a concise language.
 - (b) As a shorthand rule for computation.

- (c) As a general solution.
- (d) As an expression of the dependence of one variable on other variables.

The work done with the formula will include translation from English into algebraic language, and vice versa.

2. Graphs and graphic representations in general—their construction and interpretation in—
 - (a) Representing facts (statistical, etc.)
 - (b) Representing dependence.
 - (c) Solving problems.
3. Positive and negative numbers—their meaning and use—
 - (a) As expressing both magnitude and one of two opposite directions or senses.
 - (b) Their graphic representation.
 - (c) The fundamental operations applied to them.
4. The equation—its use in solving problems—
 - (a) The linear and the “pure” quadric equation in one unknown; their solutions and applications.
 - (b) Equations in two variables, with numerous concrete illustrations.
 - (c) A simple treatment of proportion. To include various simple applications of ratio and proportion in cases in which they are generally used in problems of ordinary life. In view of the usefulness of the ideas and training involved, this subject may also properly include simple cases of variation.
5. Algebraic technique:
 - (a) The fundamental operations.

Their connection with the rules of arithmetic should be clearly brought out and made to illuminate arithmetical processes. Drill in these operations should be limited strictly in accordance with principles 1 and 2, mentioned in section IV above. In particular, nests of parentheses should be avoided, and multiplication and division should not involve much beyond monomial and binomial multipliers, divisors, and quotients.

- (b) Factoring. The only cases that need be considered are—
 - (i) Monomial factors.

(ii) The difference of two squares.

(iii) The square of a binomial.

(c) *Fractions.*

Here again the intimate connection with the corresponding processes of arithmetic should be made clear and should serve to illuminate such processes. The four fundamental operations with fractions should be considered only in connection with simple cases, and should be applied constantly throughout the course to gain the necessary accuracy and facility. The most difficult complex fractions taken up should contain only numerical fractions in numerator and denominator.

(d) *Exponents and radicals.* The work done on exponents and radicals should be confined to the simplest material required for the treatment of formulas.

(e) *Stress should be laid upon the need for checking solutions.*

(f) *Optional topics.* Logarithms and the slide rule may be taken up with some classes. When either of these topics is included, it is recommended that discussion of the underlying theory be omitted. The subject may be taken up in connection with arithmetic or trigonometry.

D. Numerical Trigonometry:

(a) *Definition of sine, cosine, and tangent.*

(b) *Their elementary properties as functions.*

(c) *Their use in solving problems involving right triangles.*

(d) *The use of tables of these functions (three or four places).*

The introduction of the elementary notions of trigonometry into the earlier courses in mathematics has not been as general in the United States as in foreign countries. Among the reasons for the early introduction of this topic are its great practical usefulness for many citizens; the insight it gives into the nature of mathematical methods, particularly those concerned with indirect measurement; the rôle that mathematics plays in the life of the world; the fact that it is not difficult and that it offers wide opportunity for con-

crete and significant application; and the interest it arouses in the pupils.

There is no need to discuss the material listed above in detail. It appears here just as it will presently be published in the Final Report. The important feature is that on the issue of minimum essentials the National Committee initiated a marked departure from conventional committee procedure. Instead of demanding three or four years of required mathematics of four or five hours per week, the committee listed the specific facts, principles, and processes which seemed sufficiently important that all pupils should be given at least one chance to master them. The issue is not three years or four years of required mathematics. On the contrary, the *issues* before the school executives *are*: Shall we or shall we not teach the fundamentals applied to $\frac{1}{2}$; the short cut for multiplying by 25; the equivalence of common fractions, decimal fractions, and percents; the approximate character of a measurement; appreciation of the struggle for standardized units of measure; proportion; the notion of a tangent; the rule for the sum of the angles of a triangle; and so on for $2\frac{1}{2}$ pages of specific details as listed in Secondary School Circular No. 6? To be sure, the specific items of this list of essentials may need to be rejected, added or modified on the basis of further investigations. But surely a significant step has been taken when a large number of teachers in one field agree on the specific elements of a basic, exploratory course.

In our curriculum construction we are confused by the mass of material that is demanding a place. Your curriculum report now before us is a typical example. The bucket seems full and anything poured in threatens to spill something. In distributing time to the different school subjects we have operated under a "grab" policy. To my knowledge no careful study has as yet been made of the proper distribution of time in the early years. It is not likely that we shall get anywhere until each field, fine arts, social science, physical science, and the like, lays its essential elements on the table, supplemented by time studies as the mathematics group has suggested.

Enough of our field is presented so as to constitute in all probability adequate preparation for the common tasks of life,—to meet the needs of all those who go early into their careers, and in the second place the material furnishes a more intelligent basis for the further study of mathematics for those who do continue. In schools which do not offer basic general mathematics courses the pupil must

elect algebra or no algebra, geometry or no geometry without the slightest notion of what these courses contain. The early years can give the pupil a preliminary organization of the material.

Time Required to Teach the New Course. It has already been stated that there is no intention to fix the time. The assumption is that school executives will be glad to furnish the time once the need is shown. By way of comfort to principals it may be stated that the maximum suggested for required mathematics is the work through the ninth school year. It is my belief (I do not speak for the National Committee in this sentence) that the material can be taught in less time than is commonly assigned. In fact there are teachers who experience no difficulty in teaching this "core" material in three fifty minute periods per week in grades seven, eight, and nine.

It may be necessary to teach some of the older subjects three times per week. Unless the subjects are correlated and developed into composite courses, it is either that or continue to turn out children as blanks in some of the large fields of learning, science, fine arts industrial arts, and the like. To stimulate experimentation along this line the following schedule of hours now operating in its fifth year is submitted:

SCHEDULE FOR SEVENTH GRADE

	Monday	Tuesday	Wed.	Thursday	Friday
9:00	Science	English	English	English	Fine Arts
9:55	Math.	Music	History	I. Arts	History
10:50	English	Assembly	Music	I. Arts	Class Meeting Chorus
11:45	FRENCH EVERY DAY				
12:15	LUNCH AT THIS PERIOD				
12:45	RECREATION EVERY DAY				
1:15	Mech. Drawing	History	Math.	History	Fine Arts
2:10	Phy. Ed.	Math.	Phy. Ed.	Phy. Ed.	Eng.
3:00	Orchestra	Student Council	Boy Scouts	Girl Scouts	Class & School Parties
4:00					

The eighth and ninth grade schedules are similar. Most of the material is required in the form of basic survey courses and it is hoped that the explanatory function operates within the subjects.

The Problem of Differentiation. The committee has little to say about differentiation for the good reason that no one seems to know very much about it. Differentiation will probably take the form of differences in applications in the ninth school year. Undoubtedly there are cities that will employ this material in commercial, academic and industrial groups and place the emphasis on different applications. As life grows more complex the problem of fitting the man for a specific job may simplify in the sense that training for a few days, for a few weeks, or at most for a few months may be adequate for positions that offer considerable financial rewards. The important task seems to be to give all pupils a chance to take the basic explanatory course where the emphasis is not only upon tools but upon the appreciation and understanding of simple fundamental principles.

How Shall the Material Be Taught? Next, we need to consider the manner in which this material shall be taught. It was not the intention of the committee to suggest a single course of study either by years or half years, or to recommend any artificial separation of topics. Nevertheless, it is felt that it would be helpful to teachers in this transition period to suggest the five possibilities that follow:

Plan A.

First year: Application of arithmetic, particularly in such lines as relate to the home, to industry, to thrift, and to the various school subjects; intuitive geometry.

Second year: Algebra; applied arithmetic, particularly in such lines as relate to the commercial, industrial, and social needs of our country.

Third year: Algebra, trigonometry, demonstrative geometry. (By this plan the demonstrative geometry is introduced in the third year and arithmetic is practically completed in the second year.)

Plan B.

First year: Applied arithmetic (as in Plan A); intuitive geometry.

Second year: Algebra, intuitive geometry, trigonometry.

Third year: Applied arithmetic, algebra, trigonometry, demonstrative geometry.

(By this plan trigonometry is taken up in two years, and the arithmetic is transferred from the second year to the third year.)

Plan C.

First year: Applied arithmetic (as in Plan A); intuitive geometry; algebra.

Second year: Algebra; intuitive geometry.

Third year: Trigonometry; demonstrative geometry; applied arithmetic.

(By this plan demonstrative geometry is omitted entirely.) years.)

Plan D.

First year: Applied arithmetic (as in Plan A); intuitive geometry.

Second year: Intuitive geometry; algebra.

Third year: Algebra; trigonometry; applied arithmetic.

(By this plan demonstrative geometry is omitted entirely.)

Plan E.

First year: Intuitive geometry; simple formulas; elementary principles of statistics; arithmetic (as in Plan A).

Second year: Intuitive geometry; algebra; arithmetic.

Third year: Intuitive geometry; numerical trigonometry; arithmetic; algebra.

In this plan the work may be described as general mathematics.)

It will be noted that each of these plans provides that at some time or other during grades seven, eight, and nine, the pupils shall be taught application of arithmetic, algebra, geometry, and trigonometry. But a more startling fact is that in no one of these plans is it proposed that the whole year be given to any one of these topics, say arithmetic, algebra or geometry. According to the plans proposed, there are but two alternatives: (1) the teaching of general mathematics throughout these years, or (2) the breaking up of each year into various units, algebra, intuitive geometry, trigonometry, and the like. Is it not remarkable that after a widespread discussion of junior high-school courses involving nearly one hundred co-operating organizations, and in spite of the fact that current practice devotes

all of the seventh and eighth years to arithmetic and all of the ninth year to algebra, that there should not be enough sentiment in the country to support at least one plan for the junior high school that would continue conventional practice?

No one of these plans is recommended as superior to the others and only the large divisions of the materials are mentioned. In fact, no one can speak as definitely here as would be desirable for the situation requires further experimentation. As a practical suggestion it may be said that a considerable number of the eight junior high-school series of texts and two or three new arithmetics are sufficiently close to the suggested program to offer at least a beginning for those who seek relief. There is no necessity for a school principal to plunge his system into chaos. If the program which I have placed before you is sound, it can well afford to wait a decision based on results secured by many systems trying different plans. The group with which the writer is associated is engaged in experiments designed to test these materials. In co-operation with thirty-three cities* we print our own materials and administer a "testing-teaching-testing" program. In general, this program takes the form of choosing one or more sections and one control group in each city for intensive study that involves the systematic use of measurements to test the pupil's mastery of each unit of material, and a record form to show pupil responses and suitability of materials.

Summary. From the preceding articles it seems reasonable to infer that: (1) Mathematics teachers are beginning to accept and apply the principles of secondary education; (2) mathematics is being recast in the light of the seven objectives mentioned in the Curriculum Report; (3) a basic, exploratory course is not only desirable but feasible; (4) differentiation probably will not come until the ninth school year, and then will be largely a matter of applications; (5) the mathematics teachers have presented a basic minimum course of specific details (facts, principles, processes, and topics) as a basis for discussion and study; (6) we need a scientific study of the proper distribution of time and an agreement on the specific elements of each large field of human learning; (7) the traditional policy of devoting the whole year to arithmetic in grades seven and

*For the details of this program, see an article in the *Mathematics Teacher* by Raleigh Schorling and John R. Clark and "Mathematics for the Seventh School Year" printed by The Truan Press, Yonkers, New York.

eight, and teaching algebra exclusively in the ninth grade is being rejected as a waste of public funds.

HEADMASTER PHILIP W. L. COX, OF THE WASHINGTON SCHOOL OF NEW YORK CITY, was next introduced by Chairman Miller. Mr. Cox, after an intermission of two minutes, read his paper, entitled *Social Studies in the Reorganized Secondary School*.

SOCIAL STUDIES IN THE SECONDARY SCHOOL CURRICULUM

COMMITTEE REPORT PRESENTED BY

PHILIP W. L. COX

HEADMASTER, THE WASHINGTON SCHOOL OF NEW YORK

PRELIMINARY STATEMENT

At a dinner of the National Council of Social Studies last Saturday noon, Professor Leon C. Marshall presented an excellent report advocating social study in the Junior high school as a composite subject rather than the separate branches, history, civics, economics, etc., and that other subjects, as English and science, be correlated around social study.

This proposed social study core is as follows:

7th Grade—

1. Geographic bases of U. S. development.
2. Social science surveys—typical studies, as
 - (a) Simple industry and a simple society,
 - (b) Transforming effect of scientific knowledge.

8th Grade—

1. Opening of the world to the use of man.
2. Vocational survey (in functional terms).

9th Grade—

1. History of the United States.
2. Principles of social organization.

In planning the course, Professor Marshall assumes that children have obtained in the first six grades the tools and methods of

study, and a body of material in history, community civics, and geography sufficient to serve as a foundation for the social study proposed.

It is not the intention of this report to take issue with that of Professor Marshall, but only to suggest an immediate program for secondary schools that do not feel themselves ready to put so revolutionary a program into effect. Some schools may be safe in assuming that the first six grades have furnished to the pupils the tools and methods of study, and a body of material in history, community civics, and geography sufficient to serve as a foundation for the studies suggested for the seventh, eighth and ninth grades. Would that it were universally true! It is the belief of the Curriculum Committee that this condition is not sufficiently general for it to recommend for most schools that United States history be omitted from the seventh and eighth grades, or that civics and geography be taught only incidentally in connection with type studies and economic-sociological evolution.

The divergence between the reports is then due largely to a difference in assumptions. The Curriculum Committee's recommendation is intended to be so planned that it can be adopted immediately with such text-books and references as are now available, and to be taught by such teachers as most secondary schools can obtain. The only assumptions made for the pupils are that they are able to read intelligently typical texts and references in geography, history and community civics, and that they have a somewhat random knowledge of our national heroes, the significance of our holidays, and of the grosser and simpler geographic facts, physical, political and economic.

The Curriculum Committee believes that social studies may be and should be made a core subject of the entire curriculum, but that, if this is to be justified, it must be so planned and taught that it will affect not only the knowledge about our social life, but even more the interests, ideals, attitudes, habits and powers of the pupils in relation to social life.

The committee approaches its task then from two points of view.

The first point of view relates to content and available texts and teachers. A variety of experiences lead to social concepts. Familiarity with geographical facts and problems is necessary for appreciation of special relationships, and the interrelation of man and

environment; history helps us to get a sense of time relationship, how the social inheritance has been passed on and modified from generation to generation, civics emphasizes present governmental and social relationships. The great number of pupils who leave school between the beginning of the seventh and the end of the ninth grade makes it important for the school to look at each day's education for the children as though it were the last. Therefore no one of the three fields should be postponed until after large numbers have been lost.

The committee recommends, therefore, that in every year of the Junior High School course definite provision be made for geography, history and civics. If we desire to develop in the pupils a consciousness of our social and economic interdependence, we believe that it would be a mistake to present social study, as sociology, economics or any other scientific subject-organization in the junior high school.

The second point of view relates to the educational results aimed at: (1) the organization and control of knowledge in each of these associated fields; (2) the arousal of emotional states and appreciation of the significance of our heritage; and (3) the inculcation of attitudes, habits and powers through pupil participation in the class activities, the dynamic life of the school, and the desirable activities of the community. We want our social study education to function in social activity and this calls not only for knowledge, however extensive and accurate, but also for emotional drive, and for practice in responding to social situations.

With these two points of view, (1) that the plan shall be feasible for immediate introduction, and (2) that the social study education shall function in social life, your committee recommends for the junior high school as follows:

Grade 7—Geography. Social, economic, physical geography of the Mediterranean Basin and Western Europe, Latin America, and Eastern North America.

Available Texts: McMurray-Parkins *Geography*, Book II (Macmillan); Brigham-McFarland, *Book II* (A. B. C.); Allen, *Industrial Europe and Industrial South America* (Ginn); Bowman, *South America* (Rand-McNally); Frye-Atwood, *Book II* (Ginn); Blaitch, *Three Industrial Nations* (A. B. C.); Benezet, *The World War and What Was Behind It* (Scott, Foresman); Carpenter's *Readers*, *Europe*, *South America* (A. B. C.).

History. (1) *Old World Background of American History*, in-

cluding the contributions to the social inheritance made by the Egyptians, Babylonians, Jews, Phoenicians, Greeks, Romans, Italians, Arabs, Spaniards, French, British, Germans, Scandinavians, Swiss, Hungarians and Slavic peoples.

(2) The discovery, exploration and settlement of the New World to 1650.

Available Texts: Hall (Silver Burdett), Mace & Tanner (R. M. Co.), Bourne & Benton (Heath), Harding (Scott Foresman), Elson McMullan (World) and forthcoming Beard & Bagley (Macmillan).

References: Hinsdale (Appleton); Becker, Beginnings of American People (H. M. Co.).

Civics. (1) Outstanding Elements of Community Life; Their Origin, Local History, Migrations. (2) Current Events Socially significant. (3) Practice in group organizations, room organizations, group slogans, clubs, clean-up campaigns, safety first drives, etc.

Available Texts: Hill (Ginn); Dunn, Community and Citizen (Heath); Finch (A. B. C.); Hughes (Allyn Bacon); McMullen et al. (Barnes); Cabot et al. (H. M. Co.).

References: Barnard & Lewis (Winston); Lessons in Community Life (A. B. C.) (Bureau Education).

Grade 8—Geography. (1) Physical and Industrial Geography of North America. (2) Territorial development of the United States and geographic influences on History.

Available Texts: Standard Geographies (see Grade 7); Allen, Industrial North America (Ginn); Carpenter's Readers, North America, Smith (Holt); Robinson (R. M. Co.)

References: Brigham Geographical Influences on History.

History. United States to 1877 (topical rather than chronological treatment). Constant reference to great world movements, political, industrial and social.

Available Texts: Beard & Bagley (MacM.); Woodburn & Moran (Longmans); Bourne & Benton (Heath); McLoughlin (Appleton); Sparks: Expansion of American People (Scott Foresman).

References: Lessons on Community Life (Bureau Education).

Civics. (1) How we are governed—Dramatizations, Governmental elements of Public Welfare, Citizenship activities in School and Community Life, Vocational survey. (2) Socially significant current events.

Available Texts: Fisks (H. M.); Finch (A. B. C.); Nida (McM.); Hill (Ginn); Turkington (Ginn); Dawson (Holt); McPheters et al. (Holt); Dunn (Heath); Hoxie (Silver Burdett).

References: Guitteau (H. M. Co.); Cabot et al. (H. M. Co.).

Grade 9—Geography. World Survey, Expanding Commercial Interests.

Available Texts: Any standard advanced geography, Smith (Holt); Robinson (Rand-McNally).

History. (1) Recent American History treated topically, World Relationship. (2) Socially significant current events. (3) Vocational survey.

Available Texts: Beard & Bagley (MacM.); Woodburn & Moran (Longmans); Leavitt & Brown (MacM.); McLoughlin (Appleton); Comman & Gerson; Topical Survey (Heath).

Civics. Elements of Public Welfare, protection, health, education, etc.

Available Texts: Leavitt & Brown (Ginn); Geiser: Democracy vs. Autocracy (Heath); Lessons in Community Life (Bureau Education); Civics Texts (see Grade 8 list).

References: World Almanac, Book of Knowledge, International Year Book, etc.

Grade 10—Study of Nations; or World History to 1789.

Available Texts: West's Modern Progress (Allyn Bacon); Robinson & Beard (Ginn); Webster (Heath).

References: Tuel: A Study of Nations (H. M. Co.); Geiser: Autocracy vs. Democracy (Heath); Bryce: Modern Democracies (MacM.); Wells: Outline of History (MacM.); Van Loon: History of Mankind (Boni & Liveright); State Syllabi, New York, Maryland, New Jersey.

Grade 11—(1) American History and Civics.

Available Texts: Beard (MacM.); Muzzey (Ginn); Hart (A. B. C.); Reed, Form & Functions (World); Foreman: American Democracy (Century); Woodburn & Moran (Longmans); Ashley: New Civics (MacM.). (2) Current Events.

The course in American history should be discontinued and replaced by a year course in Economic and Sociological organization, as soon as (1) a class is available in Grade XI that has had in the Ninth Grade the course in recent American history as recommended, and (2) as soon as our teachers have had more experience in adapt-

ing economics and sociology to high school pupils in the Twelfth Grade course recommended below.

Thereafter a course in American history may well be offered by larger schools as an elective substitute or supplementary course, but the constant prescription should be economics and sociology.

Grade 12—Economic Organization: One-half year.

Available Texts: Marshall & Lyons (MacM.); Carver (Ginn); Bullock (Silver Burdett); Thompson (Sanborn); Smith: Commerce and Industry (Holt).

References: Lessons in Community Life (Series A) (U. S. Bureau Education).

Problems of Democracy: One-half year.

Available Texts: Towne: Social Problems (MacM.); Tufts: The Real Business (Holt); Burch & Patterson: American Social Problems (MacM.); Elwood Sociology and Modern Social Problems (A. B. C.); Williams: Problems of American Democracy (Heath).

References: Bulletin 1916, No. 28, Bureau of Education; Stewart: Social Problems (Allyn Bacon).

When teachers have familiarized themselves with the content and method of these courses, Economics should be taught as a full year course in the Eleventh Grade and Problems of Democracy as a full year course in the Twelfth Grade.

Small high schools may well offer the courses recommended herein in alternating years, thus reducing the teaching time required.

The general position of the committee in regard to senior high school history is this: It is a valuable cultural background. It has great potentialities in encouraging and directing worthy leisure activities. In this regard it is similar to literature, elective courses in which are also desirable.

But when judged on the basis of comparative values, it is the committee's judgment that history, the interesting story of man's development from the savage to his present glorious, but still semi-savage state, has too little direct contribution to more intelligent participation in social life to justify a more continuous appearance of history in the prescriptions than that allotted to it in the outline above.

It is the hope of the committee that experimental schools, associated with the schools of education of our great universities, will

continue to work out for us more scientifically planned and tested courses than are now available. It would be especially valuable if such schools could establish some sort of clearing house, not associated with any special field of social science, for comparisons of results and for the dissemination of information. But at least five years must pass before such a course is available. Meantime, we must take such material as is now available and make the best of it.

Acknowledgment is gratefully made to Mr. R. N. Hatch of the Horace Mann School, New York City; Dr. Albert Shields, Institute of Educational Research, and Dr. H. O. Rugg, Lincoln School of Teachers College, New York.

REPORT OF CURRICULUM COMMITTEE

PRINCIPAL EDWIN L. MILLER

NORTHWESTERN HIGH SCHOOL, DETROIT, MICHIGAN

Our detailed report, the result of several years' work, is in your hands. This document recommends:

1. We recognize the seven aims of Mr. Kingsley's committee as our objectives.
2. Courses should be defined, not in terms of subject-matter, but in terms of the changes to be produced in pupils.
3. Curricula and courses should be formulated for different degrees of ability.
4. There should be a required central core of work along the lines essential to personal and social efficiency. This should include training in health, language, the social sciences, the exact sciences, the fine arts, and vocations.
5. This core program will occupy all of the pupil's time in Grades 7 and 8, 84 per cent in Grade 9, 68 per cent in Grade 10, and 50 per cent in Grades 11 and 12. The rest of of the time is to be devoted to vocational and prevocational training, the latter term including preparation for college.
6. The elective or optional subjects should be selected by vocational groups and not by single subjects or courses.
7. We recommend that this report be adopted, at least in principle, and that committees be appointed in Health Education, Language, Social Science, Exact Science, The Fine Arts, and Vocational

Education to formulate and report in each of these branches detailed courses of study and procedure for each unit in the school curriculum.

PROPOSED SECONDARY-SCHOOL CURRICULUM

1. The aim of education is the development of the individual pupil in such a way that, both during his school career and his later life, while himself enjoying the fullest possible measure of happiness, he shall contribute according to his full ability to the happiness of others.

2. In order to realize this aim educators must keep in mind seven objectives: (1) health; (2) command of the fundamental processes needed as tools in the affairs of life; (3) worthy home membership; (4) citizenship; (5) vocational guidance and training; (6) worthy use of leisure; and (7) ethical character.

3. The supreme function of the high school is the formation of worthy attitudes and ideals. The root of such attitudes and ideals is understanding. Teachers must sell their subjects to pupils. General survey courses in any subject should therefore generally precede intensive work in that subject in order that its life significance may be made clear to pupils. In general, all subject matter should be chosen to develop the ideal of service.

4. Courses should be defined in terms of changes to be produced in pupils rather than in terms of subject matter. Clearer thinking, more knowledge, wider interests, higher ideals, more desirable habits, and increased power should be sought.

5. The methods used should yield a maximum of self-direction, self-appraisal, and self-control, and should give experience in working coöperatively with others.

6. In determining the standards of attainment in any subject there should be taken into account the needs of society, the varying abilities of pupils, the next stage in the pupil's development, the ability of the average teacher, available equipment, available time, and available methods of teaching.

7. Direction of pupils toward curricula and courses should be on the basis of measured knowledge of intelligence, of vocational aptitudes, and of educational status, which will increase the probability of successful work. That is, every effort should be made to eliminate the chances of failure. Pupils of like abilities should be

taught together. Therefore, curricula and courses must be formulated for different degrees of ability.

8. In all continuous curricula, and as far as possible in all other educational work, provision should be made for a central core of work essential to the development of personal and social efficiency. This central core should consist of provision for progressive development throughout the training in: (1) health; (2) command of spoken and written English; (3) worthy use of leisure time through activities in the fields of literature, art and music. There must also be some study of civics, sociology, and political economy, some knowledge of the race's history as a whole, some contact with scientific method and achievement, some experience in the use of the principles of saving, spending, and accounting for money. These are fundamental and should be uniform in all schools. The election of additional subjects should be by curriculum groups or courses and mainly in the fields of vocational training or preparation for higher education. In other words, college preparatory courses should be considered vocational and treated on the same exacting plane as other vocational subjects.

9. In general, the work common to all curricula should include each of the six major educational divisions: (1) Health Education; (2) Language; (3) The Social Sciences; (4) The Exact Sciences; (5) The Social Arts; (6) Vocational Training. The following is a possible distribution of the subjects that should constitute the core of the curriculum and that all pupils should be required to pursue:

Core Subjects, each to have not less than five 40-minute periods a week, four 50-minute periods, or an equivalent.

(1) *Health*. Grades 7-12.

- (a) Exercise in gymnasium and on playground.
- (b) Relaxation by means of games.
- (c) Instruction in eating, sleeping, clothing, swimming, bathing, biology, hygiene, physiology, housing, first aid, safety, good sportsmanship.
- (d) A health card should be kept for each pupil for Grades 7-12, nurses and physicians supplied, and instruction courses established for teachers.

The health program should be organized so as to progress from term to term, and include games, exercise, personal hygiene, health habits, nutrition, clothing, sanitation, first aid, housing, physiology, biology, etc. It can be put into full operation only when proper

physical provision is made for the work; but a beginning should be made, of course, with such means as are available.

(2) *Language.* Grades 7-12.

Training in oral and written expression and in the arts of appreciating the printed page and the spoken word, including survey courses in the foreign languages from which English is derived.

The foreign language courses will have to be worked out experimentally on a small scale previous to being put into operation. The purpose is not to study Latin, Greek, French or Spanish for the sake of those languages, but for the sake of English. The products expected are a better command of the English vocabulary; skill in translation, which means skill in composition; and some insight into foreign health, home, civic, leisure and ethical ideals.

(3) *Social Arts.* Grades 7-12.

The term "Social Arts" is used here to designate: (a) The Fine Arts (Literature, Art, Music); (b) Ethics; (c) Studies in Current Problems of Government, Society, Science, and Industry; (d) Instruction and Work in Thrift, Safety, Charity; (e) Drives for various worthy civic and social purposes; (f) Current Events.

The courses in Social Arts should be largely, if not wholly, organized so as to require no preparation by pupils. They may be conducted in auditoriums and in groups ranging from 50 to 100. They may include, among other things, instruction by movies, by stereopticons, by phonographs, by concerts, by speakers, by plays, by demonstrations, etc., etc. The participation of the pupils themselves in the conduct of these exercises should be encouraged.

(4) *Social Sciences.* Four units in six years.

(a) Survey of Civic Life and Institutions.

(b) American History, including its European background, U. S. Geography, and its social and economic problems.

(c) Civics.

(d) Problems of Democracy.

(5) *Exact Sciences.* Grades 7-9.

(a) Applications of Arithmetic, Algebra, and Geometry.

(b) General Science.

(c) General Geography.

(d) General Bookkeeping.

(6) *Vocation.* Grades 7-8.

(a) Shop and office experience in many fields, including Household Mechanics for boys and Household Arts for girls.

(b) Definite vocational training for pupils who cannot remain long in school.

(c) Foreign language training for pupils whose ability and prospects render such work desirable.

(7) *Vocational Electives.* Grades 9-12.

In Grade 9 one, in Grade 10 two, and in Grades 11 and 12 three units should be devoted to direct vocational training or to preparation for the vocational training that leads to teaching, law, medicine, engineering, art, music, business administration, journalism, literature, and other professions, i. e., college preparatory work.

This program, if put into operation Jan., 1923, in Grade 7B, would then reach 8B in Jan., 1924; 9B, Jan., 1925; 10B, Jan., 1926; 11B, Jan., 1927; and 12B, Jan., 1928.

The elective or optional studies should be chosen by groups selected so as to prepare the pupils for a definite vocation, the word vocation being used in a broad sense, so that it will include those studies which lie at the foundation of teaching, writing, law, medicine, engineering, dentistry, business administration, etc., as well as commercial studies, drawing, manual arts, household arts, automobile mechanics, etc. There should therefore be various courses, designated as Teachers' Preparatory, College Preparatory, Engineering, Commercial, Household Arts, Mechanics, Art, Music, Literature, Science, Mathematics, Language, Pre-Medic.

As a type of these groups, the following are suggested, the non-core subjects being marked (v) for vocational:

COLLEGE PREPARATORY CURRICULUM

Each subject to have each week at least five periods of 40 minutes each or the equivalent.

9B (1) Health

(2) Language

(3) Social Arts

(4) Social Science

(5) General Mathematics

(v) Latin, French, Spanish,
Manual Training, Me-
chanical Drawing,
Household Arts, Mu-
sic, or Art.

9A (1) Health

(2) Language

(3) Social Arts

(4) Social Science

(5) General Mathematics

(v) Latin, French, Spanish,
Manual Training, Me-
chanical Drawing,
Household Arts, Mu-
sic, or Art.

- | | |
|---|--|
| <p>10B (1) Health-Physiology
 (2) Letter and News Composition
 (3) Social Arts
 (4) Social Science
 (v) Latin, French, Spanish, Manual Training, Mechanical Drawing, Household Arts, Music, or Art.
 (v) Algebra (1, 2)</p> | <p>10A (1) Health-Biology
 (2) Types of Literature
 (3) Social Arts
 (4) Social Science
 (v) Latin, French, Spanish, Manual Training, Mechanical Drawing, Household Arts, Music, or Art.
 (v) Algebra (2, 3)</p> |
| <p>11B (1) Health
 (2) Composition Arts
 (3) Social Arts
 (v) Geometry (1)
 (v) Take 2: Greek, Latin, French, Spanish, History, or Science.</p> | <p>11A (1) Health
 (2) History of Literature
 (3) Social Arts
 (v) Geometry (2)
 (v) Take 2: Greek, Latin, French, Spanish, History, or Science.</p> |
| <p>12B (1) Health
 (2) History of Literature
 (3) Social Arts
 (v) Take 3: Geometry (3), Greek, Latin, French, Spanish, History, or Science.</p> | <p>12A (1) Health
 (2) Vocational Composition
 (3) Social Arts
 (v) Take 3: Algebra (4), and Trigonometry, Greek, Latin, French, Spanish, History, or Science.</p> |

ENGINEERING CURRICULUM

- | | |
|---|---|
| <p>9B (1) Health
 (2) Language
 (3) Social Arts
 (4) Social Science
 (5) General Mathematics
 (v) Latin, French, Spanish, Mechanical Drawing, or Shop</p> | <p>9A (1) Health
 (2) Language
 (3) Social Arts
 (4) Social Science
 (5) General Mathematics
 (v) Latin, French, Spanish, Mechanical Drawing, or Shop</p> |
|---|---|

- | | |
|---|---|
| 10B (1) Health-Physiology | 10A (1) Health-Biology |
| (2) Letter and News Com-
position | (2) Types of Literature |
| (3) Social Arts | (3) Social Arts |
| (4) Social Science | (4) Social Science |
| (v) Algebra (1, 2) | (v) Algebra (2, 3) |
| (v) Latin, French, Spanish,
Shop, or Mechanical
drawing | (v) Latin, French, Spanish,
Shop, or Mechanical
Drawing |
| 11B (1) Health | 11A (1) Health |
| (2) Composition Arts | (2) History of Literature |
| (3) Social Arts | (3) Social Arts |
| (v) Geometry (1) | (v) Geometry (2) |
| (v) Chemistry (1) | (v) Chemistry (2) |
| (v) Latin, French, Spanish,
or History | (v) Latin, French, Spanish,
or History |
| 12B (1) Health | 12A (1) Health |
| (2) History of Literature | (2) Vocational Composition |
| (3) Social Arts | (3) Social Arts |
| (v) Geometry (3) | (v) Algebra (4) and Trig-
onometry |
| (v) Physics (1) | (v) Physics (2) |
| (v) Latin, French, Spanish,
or History | (v) Latin, French, Spanish,
or History |

COMMERCIAL COURSE

- | | |
|-------------------------------------|-------------------------------------|
| 9B (1) Health | 9A (1) Health |
| (2) Language | (2) Language |
| (3) Social Arts | (3) Social Arts |
| (4) Social Science | (4) Social Science |
| (5) General Arithmetic | (5) Bookkeeping |
| (v) Typewriting and Pen-
manship | (v) Typewriting and Pen-
manship |

- | | |
|--|--|
| 10B (1) Health-Physiology | 10A (1) Health-Biology |
| (2) Letter and News Com-
position | (2) Types of Literature |
| (3) Social Arts | (3) Social Arts |
| (v) Bookkeeping | (v) Bookkeeping |
| (v) Shorthand | (v) Shorthand |
| (v) Typewriting | (v) Typewriting |
| 11B (1) Health | 11A (1) Health |
| (2) Composition Arts | (2) English Literature |
| (3) Social Arts | (3) Social Arts |
| (v) Elect 3: Bookkeeping,
Shorthand, Typewrit-
ing, Spanish, Mathe-
matics, Science, History | (v) Elect 3: Commercial
Law, Shorthand, Type-
writing, Mathematics,
Science, History |
| 12B (1) Health | 12A (1) Health |
| (2) English Literature | (2) Vocational Composi-
tion |
| (3) Social Arts | (3) Social Arts |
| (v) Elect 3: Cost Account-
ing, Shorthand, Busi-
ness Organization,
Spanish, Mathematics,
Science, History | (v) Elect 3: Salesmanship,
Shorthand, Office Prac-
tice, Spanish, Mathe-
matics, Science, History |

PRE-MEDICAL AND PRE-DENTAL COURSE

- | | |
|--------------------------------------|-------------------------|
| 9B (1) Health | 9A (1) Health |
| (2) Language | (2) Language |
| (3) Social Arts | (3) Social Arts |
| (4) American History | (4) American History |
| (5) General Mathematics | (5) General Mathematics |
| (v) Latin | (v) Latin |
| 10B (1) Health-Physiology | 10A (1) Health-Biology |
| (2) Letter and News Com-
position | (2) Types of Literature |
| (3) Social Arts | (3) Social Arts |
| (4) Social Science | (4) Social Science |
| (v) Algebra (1, 2) | (v) Algebra (2, 3) |
| (v) Latin | (v) Latin |

11B (1) Health	11A (1) Health
(2) Composition Arts	(2) History of Literature
(3) Social Arts	(3) Social Arts
(v) Geometry (1)	(v) Geometry (2)
(v) Chemistry (1)	(v) Chemistry (2)
(v) French or Spanish	(v) French or Spanish
12B (1) Health	12A (1) Health
(2) History of Literature	(2) Vocational Composition
(3) Social Arts	(3) Social Arts
(v) Algebra (4)	(v) Trigonometry
(v) Physics (1)	(v) Physics (2)
(v) French or Spanish	(v) French or Spanish

It was moved by Mr. Miller that the reports given be printed.
The motion carried.

The Chairman presented PRINCIPAL WILLIAM A. WETZEL OF TRENTON HIGH SCHOOL, TRENTON, NEW JERSEY, who gave his report, *The Distribution of Students' Time*.

REPORT OF COMMITTEE ON DISTRIBUTION OF TIME

Chairman, Principal William A. Wetzel, High School, Trenton, New Jersey; Principal Edward Ryneerson, Fifth Avenue High School, Pittsburgh, Pennsylvania; Principal Roy Cook, Topeka High School, Topeka, Kansas; Principal Parke Schoch, West Philadelphia High School for Girls, Philadelphia, Pennsylvania; Principal E. H. Kemper McComb, Manual Training High School, Indianapolis, Indiana; Principal John L. Stewart, Parkersburg High School, Parkersburg, West Virginia; Principal Roscoe C. Hill, East Side High School, Denver, Colorado.

Many advances in secondary educational theory have been made in the last few years. Prominent among these are the publications of the Committee on Reorganization of Secondary Education and various studies made in the field of directed study. The purpose of this report is to frame a time schedule which will make it possible to put into educational practice some of the fundamental ideas embodied in these studies. Necessarily such a report must give consideration to the length of the class period, the total number of weekly periods, the number of weekly periods per subject, the number

of subjects to constitute a normal schedule, the institutional period, and the length of the school day.

I. *Length of the class period.*

It is very evident from the results of careful inquiry that class periods at present seldom exceed forty-five minutes in length and frequently are limited to forty minutes. Nor do many administrators seem to feel the need of a longer period. One principal writes that forty minutes is long enough "if made snappy." Another considers "forty-five minutes long enough for any high-school study." Another principal writes that to lengthen the class period to sixty minutes is "rotten from scholarship and pupil's health standpoint." Another states that in less than thirty minutes "children become mentally weary."

On the other hand, one of the best authorities in secondary education writes: "I am decidedly of the opinion that the longer school period with a reorganized recitation is greatly needed. I think we should work toward a class period of uniform length, so that the double period nuisance can be eliminated." Two others, one in charge of an excellent technical high school, the other an assistant superintendent in charge of high schools in a large city, say that sixty minutes is long enough for all secondary-school laboratory periods. One of them includes shops, but admits that "teachers will howl."

The committee believes that the first vital consideration is the character of the recitation; that the traditional recitation period of checking the work of the class which now consumes so much time in the daily oral quiz, the objective test takes less time, is more scientific, more searching, and serves as a greater incentive to pupils to do their daily work.

The committee does not at this time recommend a formula for the distribution of the time of the class period. It rather stresses the fact that checking work previously assigned is only one phase of work, that the big thing is to direct pupils intelligently in their work, that the class period is the time primarily for "creative thinking"; that the class room is a work shop primarily and not an accounting room, that the teacher is a director rather than a bookkeeper; that the pupils should come to the class room without something and leave with something, rather than the reverse. The committee believes

further that study periods, except as organically connected with a teaching program, should be discontinued as far as possible.

The committee (with one exception) is agreed that the technique of the recitation in a senior high school requires a minimum of sixty minutes.

The committee believes that junior schools adopting the sixty-minute period should relieve the fatigue through some form of setting-up exercises during the period.

II. *Number of weekly periods.*

The committee believes that the poor pupil is entitled to as much of the teacher's time as the good pupil; and that varying the number of class periods according to the ability of the pupil is in accordance with the theory of the recitation of the "hearing classes" type.

The committee recommends that, excepting certain technical schools stressing shop work, twenty weekly periods of class room instruction may be accepted as standard.

III. *Number of weekly class periods per subject.*

The committee believes that insistence on the uniform number of five weekly periods is not in accordance with sound educational theory.

In secondary schools outside of the United States the number varies from one to eight. The Committee of Ten recommended four. In the latest program for junior high schools in Pennsylvania the number of class periods in English, Mathematics, Social Studies, and science varies from two to five.

The committee believes that a definite organization of units of work and intelligent method are fundamental to a consideration of the number of weekly class periods; that in the organization of any such unit having for its purpose the working of certain changes in the pupil, the definite contribution of the unit should be definitely listed under knowledge, interests, ideals, habits, power; that class room procedure should have in mind just as definitely the attainment of the aims listed under these heads. The number of weekly class periods may therefore vary according to the character of the unit of work as outlined above.

The committee wishes to call attention to the fact that daily class periods are not necessary to meet the time requirements of a college entrance unit (120 clock hours). It is evident that four

weekly class periods of 60 minutes each will more than do this. The committee also reports that schools not holding to the daily recitation program have no difficulty, with the possible exception of first year Latin, to cover any college entrance unit of work in two semesters of four weekly class periods of a minimum of sixty minutes.

If uniformity is desired, the committee recommends four rather than five weekly class periods. In the senior school one member of the committee would limit this recommendation to the last two years.

IV. *The number of subjects to constitute a normal schedule.*

The report of the Committee of Ten forecasts the problem now under consideration in the following words: "There is an obvious convenience in the number five (weekly periods), because it ordinarily gives one period a day for five days in the week. But there is also an obvious disadvantage in making too free use of the number five. It practically limits to three, or at most four, the number of subjects which the individual pupil may pursue simultaneously, and this limit is inexpedient in a four-year program." The committee believes that even more than thirty years ago, a consideration of problems vital to the lives of our young people involves a wider program than can be fitted into a four-subject five-hour schedule. *Cardinal Principles of Secondary Education* stresses these problems.

An analysis of the curricula of the best high schools in the United States shows no common thought concerning a program of civic training.

Ours seems to be a democratic program of education rather than a program of democratic education.

Curriculum making for secondary schools needs not so much individual liberty on the part of the framers of these curricula as it needs a recognition of common needs and common training to meet those needs.

Present world conditions and the relation of our democracy to those conditions make imperative the adoption of a definite program of civic training for our secondary schools.

The report of the Committee of Ten thirty years ago recommended that one-fourth of the whole high school course should be devoted to the natural sciences and that history and civil government be placed in every curriculum during the last eight years of the school course.

Such a program on civic training should include: One unit of general science, offered not later than the ninth year, and one unit of "biology in its relation to human welfare," offered not later than the tenth year. (Report of Committee on Reorganization of Science in Secondary Schools.)

Four full units of social studies in the last four years of the secondary school course as outlined in the report of the Committee on Social Studies.

The committee believes that the number of units required for a diploma should be the same in all curricula. The variation should consist in the character and not in the number of the units. College entrants should be required to take the program of civic training. An institution supported by public taxes has no right to shunt this responsibility. Besides there is no guarantee that a pupil taking a college preparatory curriculum will go to college, or that, if he goes, he will receive this training.

In order, therefore, to find a place for the consideration of such problems are involved in any plan of reorganizing the secondary-school program, the committee recommends that the number of classroom subjects to constitute a normal schedule shall be five.

Schools now operating on a four subject five hour program can shift readily to a five subject four hour program. The pupil hour load per day will not be increased in such a change. The increase in the pupil hour load per week is largely offset by the advantage of the longer class period. Four class periods of sixty minutes per week probably offer greater opportunity for individual work than five class periods of forty-five minutes each. Neither does such a change involve an increase in the number of teachers. It does involve a readjustment of the teaching force. Lowering the time demand of each of four subjects from one-fourth to one-fifth of the total classroom time will release the necessary number of teachers to teach the additional subject. The change is not so easy if the number of weekly periods is not uniform in the reorganized schedule. But the principle is the same.

V. *The institutional period.*

The daily program should provide a definite period for activities peculiar to the life of the school as an institution. The custom of taking this time from the regular academic program should be discontinued.

VI. *Length of school day.*

With proper shop, gymnasium, and auditorium facilities, the school day will approximate six hours in length, of which four hours for most pupils will be spent in class rooms under the direct instruction of teachers.

EXHIBIT A

PRESENT STATUS OF CIVIC TRAINING IN HIGH SCHOOLS

The thirty-two combinations listed below of the required units in science and social studies in the best high schools of the United States show no constructive thinking on the part of the curriculum makers to meet a common need of civic training in our public schools. One school requires only four years of English and one year of algebra. Another school requires three units of English, one of algebra, one of geometry, and one of a laboratory science, because "this conforms to university entrance requirements for all colleges." Combination (1) is typical of schools requiring no science and no social studies; combination (2) of schools requiring no science and two half-year credits of social studies, but the character not specified, etc.

HALF-YEAR CREDITS REQUIRED IN:

Science		Social Studies	
1.	0	0	
2.	0	2	
3.	0	2	1 Civics, 1 American History.
4.	0	4	2 American History, 2 History.
5.	0	6	Social Science.
6.	0	6	2 Vocations and Community Civics.
			2 American History and Literature.
			2 English History and Literature.
			1 Greek History, 1 Roman History.
7.	1 Gen. Sci.	2	
8.	Com. Geog.	2	
9.	1 Gen. Sci.	5	1 Community Civics, 1 Mod. Hist.
10.	2 Phys. or Chem.	0	1 American History, 1 Civic Govt.
11.	2 Any Lab. science.	0	1 Economics.
12.	2 Any science	2	
13.	2 Any science	2	
14.	2 Physics	2	Any History.
15.	2 Any science.	2	American History and Civics.
16.	2 Biology	2	American History.
17.	2 Any science	3	Community Civics and Vocations.
18.	2 Lab. Science	4	History and Civics.
19.	2 Lab. Science	4	2 American History, 1 Civics.
			History.

20.	2 Lab. Science	4	4 History or 2 History and 2 Economics.
21.	2 Any science	4	Social Studies of which 2 must be History.
22.	2 Gen. Science	4	2 Civics and Vocations, 1 Modern European History, 1 Amer. His.
23.	2 Biology or Gen. Sci....	6	2 Modern European History. 1 American History, 1 Amer. Govt.
24.	2 Chem. or Physics.....	7	1 Civics (9th), 2 European Hist. 2 American History, 1 Economics. 1 Citizenship, 1 Greek and Roman History, 1 Medieval History.
25.	3 1 Physiology, 2 Physics or Chem.	4	2 Modern European History, 1 American History, 1 Civics.
26.	4 2 Gen. Biology	2	2 Civics, 2 History.
27.	4 2 Biology	2	Any Social Study.
28.	4 2 Senior Sch. Science. 2 Senior Sch. Science.	2	American History and Civics.
29.	4 2 General Science	2	1 American History, 1 Civics.
30.	4 2 Biology or Botany or Physiology, 2 Phys. or Chemistry	2	American History.
31.	4 2 Biology	3	History or Civics or Economics.
32.	4 2 Physics or Chem. 2 General Science	8	2 Civics and Economics. 2 Ancient History. 2 Com. Civics, 2 Background American History, 2 American Hist. 2 Social Problems.

FIFTH SESSION

The fifth session was called to order by President Prunty at 2:06 P. M. The first paper, *The Assembly Period*, was presented from manuscript by Professor Elbert K. Fretwell, Teachers College, Columbia University.

THE ASSEMBLY.

PROFESSOR ELBERT K. FRETWELL

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Are high school assemblies desirable? If so, what kind? How should they be organized and directed and how often and how long should they be? The test of the work of the assembly will be found not in theory but in the effect on the life and character of the pupil as a citizen of the school and upon the spirit and work of the school in developing good citizens.

The fundamental business of the schools, supported by public taxation, is to train pupils to perform successfully their duties and meet their opportunities as citizens. We have come to recognize that the way to develop pupils into good citizens of the future is to organize our educational system so that pupils of elementary and secondary school age are good citizens of the school and in all their activities in the community, *now*. Pupils in our schools have their rights, duties, and privileges *now* and it is in meeting these obligations and opportunities that they develop the mental attitudes, habits, and skills that make them increasingly good citizens.¹ However, it is not enough for the pupil-citizen to obey the laws. The situation must be so arranged that the pupil finds satisfaction in creating new opportunities, in assuming successfully new obligations that make for the good of himself and of his fellows. This pupil is not to be a passive, harmless individual but a citizen who knows the facts, thinks straight, is morally earnest and strives with enthusiasm to improve the conditions he finds. It is possible to organize the conditions so that the pupils desire to improve the school, and, through repeated activities, form the habits and acquire the skills necessary for constructive citizenship. If the good citizen is one characterized by such qualities as initiative, leadership, coöperation and intelligent obedience to authority, it is of primary importance

that all educational agencies enable pupils to practice these qualities with satisfaction.

It is the business of the whole school situation to develop the qualities of citizenship. There are at least four ways by which the school may carry on this endeavor: by the content of the curriculum, by the method of teaching, by the participation of the pupil in the extra-curricular life of the school and by the utilization on the part of the school of such supplementary agencies as scouting and the Junior Red Cross. The pupil must not lead two comparatively unrelated lives at once: one composed of doing school work that the teachers want him to do and another made up of participating in the social life of the school that he wants to do. The whole school scheme must provide for his learning to be a better citizen by his practice in being a citizen.

In the extra-curricular phase of this citizenship training program, the school assembly can train the citizens of the school to perform better those desirable activities he is going to perform anyway and at the same time, under skillful guidance, the assembly may be a means of revealing to the young citizen higher types of activity and make these desired and to an extent possible.

The assembly as one means the school uses, for the direct educating of its citizens, may take an active part in the *formation of public opinion*. Since all people and, especially the young, are greatly influenced by the approval or the disapproval of their fellows, the participation of the whole school, teachers and pupils, in a conscious effort to form intelligent public opinion is of great importance in training citizens. The assembly is one place to form this opinion. Many high-school problems that depend largely on public opinion demand the united effort of the whole group for their solution. What is the *attitude of the whole school*, pupils as well as teachers, on the matter of *scholarship*? What responsibilities shall the pupils with their advisers assume in the direction of extra-curricular activities? What has the school done in the past to merit the estimation in which it is now held by the community? What are the resources of the school at the present time to aid it in improving on its own previous record? What is the school's spirit of sportsmanship for its own teams, its rooters and for the reception of visiting teams? What is the relation of individual pupils and of the whole school to the community? What is the school's attitude toward care of the building, toward punctuality and regular attendance? How shall the

school receive its visitors to the building or to individual classes? How shall the pupils care for their individual property? What is the school's attitude toward clubs and athletic teams—shall there be clubs and teams for everyone, or shall there be just three debaters and eleven football players? These are, of course, just a few of the more general problems that the whole school must solve.

The principal can solve all these problems himself and announce the solution to the school. Even if he could solve all the problems correctly and do the impossible by putting his solutions into immediate effect, he would have robbed the pupils of the educative opportunity afforded by these insistent problems that must be solved. The pupils by discussing these problems in the home room, in class organizations, in student associations, and in assembly, are educating themselves. Such a democratic process is slower than an order from the principal's office, but a principal who works through this process will get more lasting and more satisfying results. The forming of intelligent public opinion is one purpose of the assembly.

The assembly may aid in developing a *sense of unity* in the school. The pupils are divided into classes according to their academic advancement; further divided by their curricula; and still further by their recitation groups. This same breaking up into groups is carried on in the diversity of extra-curricular interests and in the location and social position of the home. How can any unity prevail when there is of necessity almost an infinite variety of individual differences? The assembly can aid in developing desired unity by stressing factors and interests common to all; by singing together; by programs that explore for the pupils and teachers the interests and activities of each subject matter department; by development of public opinion of the whole school; by the support of the schools' representatives in inter-school contests; by assembly programs in which representatives of the whole school participate. The assembly may bring to the pupils and teachers by knowledge, by spirit and by habit the consciousness of the unity of the social group. Each pupil and each teacher through the assembly may get a view not only of his privileges but his responsibility for the interests and happiness of the whole group and he may through participation form the habit of contributing his small best for the good of the group.

The conscious forming of intelligent public opinion and of developing a sense of unity in the school may be carried further by these assemblies devoted to transacting the school's business, espe-

cially its extra-curricular business. Here may be the campaigns and the culminations of school elections, the installation of student officers, the awarding of insignia or of any form of special recognition. The assembly may take on the form of a town meeting to consider the needs of the school, initiate and carry out plans for improving the internal life of the school or promoting better relationships with outside groups. These assemblies that plan action for the whole group are usually devoted to backing up the team that is to meet the ancient rival. Such an assembly points the way to action. The combative spirit of this same group can, through assembly periods, strive for the honor of the school in eliminating abuses or promoting school virtues new or ancient. The assembly may aid in tuning up the whole school. The united efforts of pupils and teachers to promote the school's best interests, to sing their best songs, to produce or listen to their best plays, or debates, to learn what various departments of the school are doing, even to hear individuals or a group present worthwhile ideas which they understand intellectually and emotionally and believe in, is in itself a tuning-up process for the hearers and of still greater value to the most active participants. The mental attitude and mood of the school at the close of an assembly is not an accident when an assembly committee composed of teachers and pupils in active co-operation with the whole school, has planned and directed the presentation of an assembly program.

The attitude of respect for knowledge may be developed still further when a class, or representatives of various classes, share with the whole school in assembly period, knowledge, worked out in various recitation groups, that is of interest to the whole school. *Assembly programs should, to a very large extent, grow out of regular class of extra-curricular activities.* This sharing of knowledge gives a social value to information. Such a plan may aid in motivating class of extra-curricular work; pupils can see the value of the method and content of their work in preparing it so as to share its results with the whole school in assembly.

When the participation in assembly programs is wisely distributed by the assembly committee, there is training for a large percentage of the school in the expression of worthwhile ideas to an interested group. So far as the actual presentation is concerned, it might be as well or even better done by members of the faculty, but the educational value that lies in organizing, preparing, and presenting the material would be lost to the pupils. The teacher does not

rob the pupil of his educational opportunity by solving his mathematical problems for him; rather the teacher aids the pupil by advising and guiding him in working out their solutions. In the same manner the teacher *aids pupils* in presenting assembly programs. Likewise the material the pupil presents is not what the teacher or someone else has written for him but what he, profiting by the criticism of his classmates and teacher, has worked out and what he understands emotionally and intellectually. Even the shyer pupils may succeed admirably for they can be so interested in what they have worked out and are presenting that they forget about themselves. When the emphasis is on presenting ideas clearly and intelligibly so that hearers understand and get the point, the value of the training in expression may be very great.

The programs of assemblies may serve to widen or deepen the interests of many of the pupils. The material presented may be a demonstration of wireless, or of how the school newspaper is gotten out, an account of a class or club excursion, poems that some class has come to like, poems of a single author, or of a group of authors on a single subject, the story of Joseph, or Sinbad, or Gulliver. Any group when well prepared can tell the stories of King Arthur, or Howard Pyle, Joel Chandler Harris, O. Henry, or Bret Harte so as to start a run on the library. Original short stories or poems by pupils may discover to others that at least the beginning of literary effort is not surrounded by magic. One-act plays, or scenes from longer ones, that have been prepared in class, or dramatic club, may be presented in accordance with present tendencies of simplified stage setting and costume, so to give expression to the work of the class and interest others in plays and in dramatic action other than that of the "movies." Pupils from appropriate classes might work out the setting and story so that crafty Ulysses should tell his adventures to his bright-eyed Telemachus; Aeneas recount his wanderings, or Cicero expose Catiline in a meeting of the Roman Senate in the Temple of Jupiter.*

Pupils' interests may be widened also by inviting persons from outside the school to participation in the assembly program. Such outsiders can of course bring new material or possibly a new viewpoint or a new technique. This is quite true of artists, especially musicians, but such speakers or artists should not be brought in

*Francis W. Parker—School Year Book, Vol. II, 1913.

"unless the subject matter is in some way connected with the work going on in the school or unless the topic will be of immediate value in giving a new direction to some phase of school life."* The introduction of outside speakers is too often a lazy way of neglecting an educational opportunity,

The observance of special days throughout the year in assembly programs furnishes great temptation to neglect the education opportunity that is presented and to fall back on the easy method of bringing in an outside speaker. Hallowe'en, Thanksgiving, Christmas, Lincoln's and Washington's birthdays, May Day, Memorial Day, as well as local days, furnish opportunity for the moving spirit of the school to express itself. Where the assembly as an educative agency is a vital part of the school, comparatively few outside speakers are needed or desired. *Pupils form habits and are educated by what they do* rather than by what some one, however able, tells them they should do. Where all teachers and pupils have constantly in mind the possibility of developing in classwork, something that may be of use in assembly, there may be in that school, as there was in the Francis W. Parker School, requests to present worth while programs as much as forty assemblies in advance. This does not mean that there is never any need for the outside speaker who can contribute to the work already undertaken by the school or who can utilize the theme of a special day for immediate value to give a new direction to some phase of school life; but it does mean that the emphasis *will not be* on such speakers but on the co-operative efforts of teachers and pupils.

This same idea of the participation of the pupils in the assembly as one of the educative agencies of the school, will express itself in the assembly program at the beginning of the year, to welcome new pupils and new teachers to the school and for pupils and teachers to utilize the vacation experiences for the benefit of the whole school. Such experiences may serve to re-awaken school ideals and at the same time furnish suggestions to all the members of the school of how to make the next vacation period happier and more productive of educational results. In a school where such a spirit and method prevail, the assemblies and the commencements at the close of the year, may so capitalize the achievements of the graduating class as to be a powerful incentive and

*"Some Uses of School Assemblies," The Lincoln School, p. 19, 1922.

stimulus to the whole school. Instead of aping in an ineffective way the college and university commencement, the secondary school can through its assembly committee and through the advisers of the senior class, work out a commencement program in accord with the possibilities of pupils of this age and in keeping with the aims of secondary schools.

The whole aim of assemblies is based on the recognition that pupils are citizens of the school, that if they are to share in the opportunities of the school they can do so to the greatest advantage by *sharing in the responsibilities that are associated with these opportunities*. These school citizens are educated by what they do. It is the business of teachers and advisers and school leaders to arrange the situation so that the pupils can perform better those desirable activities which they will perform anyway and to use these activities so they will reveal higher types of activities and to make these activities desired and to an extent possible. The assembly is one of the school's best means of securing these results in the citizens of the school.

The aims of the assembly here presented find little, if any, room for the routine assembly made up of *perfunctory* reading of the Scriptures, formal announcements and didactic addresses. There is room and need for assemblies of real devotion. There are, in every efficient administrative office, better ways of handling announcements, and the didactic address, when often repeated, defeats itself. This inherited type of assembly happily has passed or is rapidly passing out of our high schools.

How often shall there be assemblies? A daily assembly in a school of one thousand pupils costs at least twenty-five hundred pupil hours per week. Can any school with any serious regard for the economy of time afford such an outlay? I think not. While the amount of time devoted to assemblies will depend on many phases of the school life, probably one general assembly, consuming one full recitation period, per week, is enough. In addition, there can be, with due economy of time, one assembly each week for each class. The three remaining periods for the groups that compose each class, can be devoted profitably to home room activities.

The fundamental business of the school is to train its pupils to perform successfully their duties and to meet their responsibilities as citizens. The school assembly, as one phase of extra-curricular activities, can train the citizens of the school to perform better those

desirable activities they are going to perform any way. Hence under skillful guidance the pupil's participation in the assembly may reveal to him and to his fellows higher types of activities and make these activities desired and, to an extent, possible. Pupils are citizens of the school. Practice with satisfying results makes perfect.

Organization for Educational Guidance was presented from manuscript by PRINCIPAL BURTON P. FOWLER OF CENTRAL HIGH SCHOOL OF CLEVELAND, OHIO.

THE ORGANIZATION OF EDUCATIONAL GUIDANCE

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Guidance is one of the most inspiring conceptions of modern education. As an educational principle it makes concrete many of our traditional aims that have been but vaguely conceived and only incidentally achieved. Being a principle rather than a procedure, it is difficult to say whether in any real sense guidance can be organized. It must rather permeate the school atmosphere, determine the emphasis in administration and run through every course of study and class exercises.

Vocational guidance in the strict sense of the term has not been a success. Misused and misunderstood by its friends and cast out by its foes it is being supplanted by a much worthier successor. Vocational guidance was persistently misconstrued to be guidance into jobs instead of guidance into training.

Educational guidance where intelligently practiced is an advisory function which helps boys and girls to get their bearings in the social and moral maze of modern life. Educational guidance purposes to point out in concrete fashion the social responsibilities which good citizens must bear; the moral principles which they must practise; the opportunities which the school provides; and the diversity of occupations which the world affords. An ambitious, all inclusive program to be sure, but nevertheless a compelling one.

As a basis for discussion I should like to outline the general plan in operation at Central High School in Cleveland. While in some respects this plan has been an incidental development, it is nevertheless based upon the definite principles outlined in the preceding paragraphs.

The school, which numbers twenty-seven hundred pupils, is organized on a six-year basis with a fairly definite division into 3—3 groups. At the head of the advisory system is an educational adviser who normally gives all of her time to the work of guidance. She is a trained worker in this field and has charge of the counselling and placement for part-time employment in the tenth, eleventh, and twelfth grades, besides teaching classes in occupations which are elective in the eleventh grade. These classes, in which the pupils receive school credit, meet three hours a week in addition to field trips.

This educational adviser is assisted by three grade advisers, one each in the seventh, eighth, and ninth grades, who devote one-third of their time to counselling. In the seventh and ninth grades the work consists wholly of personal conferences, the largest attention being devoted to the first semester grades, while all eighth grade pupils are organized into advisory classes which meet once a week and study a series of lessons prepared by a vocational director on the superintendent's staff. These lessons which are outlined with remarkable skill constitute one of the most valuable features of the whole advisory plan. They deal with biographical material, social and moral situations, and information about the leading occupations. The teachers have been trained to teach these lessons by extension courses and frequent group conferences.

In the personal conferences which are held with all new pupils coming into the school, with seniors about to graduate, and as many others as the time of the advisers permits, the pupil is encouraged to talk freely about his work and plans. The adviser endeavors to set up a close sympathetic relationship with the pupils in her grade, which will prompt full confidence and enable her to give helpful suggestions regarding the social life of the school, aims of courses, and election of new courses. Except in the case of seniors little is said about individual fitness for occupations. The seniors are also organized into informal groups to discuss college requirements and to receive information about local opportunities for advanced study.

In cases of misconduct, irregularity of attendance, and failure the advisers have been especially helpful. Teachers are encouraged to refer pupils to the advisers, where a personal investigation, including conference with the parents may be desirable. The school employs a full time social adviser and home visitor who is of invaluable assistance in co-operating with the advisers.

While this personal counselling is intangible and does not permit of actual measurement, it does meet a real need in a large crowded city school where personal contacts between pupil and teacher are hard to establish.

The question of what kind of records are worth keeping is a difficult one to dispose of. Pupils have been card-indexed to death. After we get their eyes, teeth, back bones, absences, and marks on a card, we go further and try to make their virtues, vices, hopes, and aspirations a matter of written record. Cubic yards of cabinets have been filled with filing cards that never again see the light of day. It takes rare skill to make intelligent use of a record card. The tendency to excess in record-keeping, which has, indeed, been partly responsible for the ill repute into which vocational guidance has fallen has been a warning to us in our attempt to set up an organization of educational guidance. After a year's experience, the advisers have evolved a very simple form which records essential facts and the advisers' own comments set down at the time of the interview. Thus a sort of continuous record is kept during the pupil's stay in the three lower grades, so that at the beginning of the senior high-school course the educational adviser has these records as a guide in further conferences and in placement work.

Besides the work of the group advisers there is another most important part of our organized guidance. Every Wednesday morning the home room period is lengthened to a half-hour, at which time the home room teacher, who is expected to be in close touch with the interests of her own group, directs a discussion or plans a program on the basis of an outline prepared in the principal's office. In this way all the pupils in the school during a so-called advisory period are considering the same general topics at the same time. The subject assigned may be "Student participation," "Habit formation" or "The protection of public property." From a psychological standpoint such a plan has distinct advantages. There is not a doubt that the morale of the school and the social efficiency of the individual pupils are greatly advanced by this arrangement. This advisory period can be made, in my opinion, to be a great unifying factor in a large school. It helps to remove, moreover, from the realm of chance the development of the social and ethical values which have been held to be important by-products of education, and makes them primary objectives to be consciously striven for and directly developed.

Space forbids an enumeration of the syllabus of topics studied

and discussed and projects engaged in during these weekly advisory periods. The following partial list will serve to illustrate some of the major aims:

1. Organization of the home room.
2. Simple dramatization to demonstrate: correct manners, how to apply for a position, how to dress, etc.
3. Forms of school service, e. g., offers of assistance in the control of traffic, lunchroom, library, and washrooms; written recommendations to the Student Council; offers of help to the Student Council.
4. Facts about occupations.
5. Why graduate?
6. Value of a college education.
7. Leadership.
 - a. Qualities of leadership.
 - b. Great leaders of history.
 - c. Notably successful Central High School graduates.
 - d. Opportunities in Central High School for the development of leadership.
8. Central High School as a school community.

The plan, which is new in the school, having been in operation for only one semester, is not without its difficulties. Not all home room teachers have equal enthusiasm in making the most of the advisory periods. We are confident, however, that as the plan is developed further and its good results made apparent entire co-operation will be achieved.

It is evident, of course, that the success of the plan depends also, not upon a formal use of the material provided but upon its adaptation through original ideas and supplementary helps. Furthermore, the preparation of suitable outlines which are richly suggestive in concrete material and social activity instead of mere moral abstractions is a tremendous task. During the present semester we are having the preparation of these outlines handled by a committee of teachers, chosen for their success in the use of the advisory period with their own pupils. In this way it is expected that a manual of suggestions for the regular use of this period will eventually be developed.

After an effective organization for guidance has been set up, there still remains the important problem of utilizing the resources of the whole school for the ends desired. There is not a subject in the

curricula which can not be made a contributing factor in guidance if the intelligent effort of all the teachers is enlisted in making the resources of their instruction available to the pupils. Student activities, assembly programs, the school paper, and campaigns each has its contribution to make in guiding pupils into the types of activity, conduct, and training which we believe to be the great ultimate objectives of secondary education.

MR. WILLIAM S. ROE, PRINCIPAL OF CENTRAL HIGH SCHOOL, COLORADO SPRINGS, COLORADO, read his paper, *Problems of the Student Body*.

SOME STUDENT-BODY PROBLEMS

THE HIGH SCHOOL A CO-OPERATIVE ENTERPRISE

PRINCIPAL WILLIAM S. ROE,

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Those problems which are to be considered "student-body problems" will vary in range and number with our conceptions of the function of the student body in the administration of a high school. I like to think of a high school as a co-operative enterprise, in which the educational endeavors of community, teaching staff, and students are co-ordinated for the production of efficient citizens, whose citizenship is to express itself in terms of capable leadership and intelligent co-operation.

MORALE

The contribution which the student body is to make in this three-partner enterprise will depend for its effectiveness upon the development of a sane and virile school spirit, a sound morale. "Morale" then, is the one outstanding, all-inclusive student-body problem. There is no shortcoming in manners or morals, no inadequacy of organization, no feebleness of idealism, which cannot be found to relate itself in some way to an underdeveloped morale. How to broaden and deepen "school spirit" so that it will not merely spend itself in the "rah-rah" side of school life but will be a potent factor in all departments of school activity,—that is the question.

Shall we consider briefly the development of school morale? The kind of spirit which may be expected to function in all departments of high-school life must grow out of a sympathetic understanding of the aims, purposes, objectives, goals of high-school edu-

cation, both in the large and in terms of specific subjects and activities. We cannot expect students to feel any degree of responsibility for the ideals and practices of the school if they have not been encouraged to share in the formulation of those ideals and the determination of those practices. Of course any wide-awake teacher will strive to relate his subject to the personal needs of his students; and many will frequently seek to discover and capitalize life-purposes. But something more is needed. A definite effort should be made to enlist the interest of every student in discussing, in some suitable group, the school's ideals and aims in every aspect of its life. It is all very well for writers of books on education to set forth the aims of secondary education; it is well that teachers and administrators should discuss these aims. But we have no right to assume that the "aims of secondary education" are the real aims of your school and my school unless we have given the boys and girls an opportunity to share in their formulation. American high-school boys and girls have a right to know what they are getting and why, what they are doing and why. Why do we show so little faith in the rationality of our boys and girls? Would we, as intelligent citizens, lend our enthusiastic co-operation to any enterprise whose purpose we did not thoroughly understand and approve? Why should we expect intelligent high-school citizens to become imbued with an enthusiastically co-operative spirit in respect to all the activities,—scholastic and extra-curricular,—in which we think they ought to interest themselves, if we deny their intelligence a generous opportunity to exercise itself in relation to the purpose of these activities? Is there any good reason why groups of thinking students, under the stimulating leadership of live teachers, should not be able to draw up, after thoughtful discussion, perfectly sane and intelligible statements of the objectives of their high school, in terms of knowledge, of physical skills, of mental abilities, of citizenship ideals? Just as the general aims of the school ought to be formulated and published as a result of teacher-guided deliberations on the part of the students, so should the aims and objectives of the several departments of study find expression as a result of similar deliberations. Definite goals can thus be set for the work of every group, goals which will be inviting because co-operatively determined. Will not such formulations serve as the rallying points of scholastic and extra-curricular activity? These formulations agreed upon, and dominant as school and department ideals, will not the ordinarily puzzling problems of school

life become soluble because seen in their relation to fundamental school aims and objectives?

A vital school spirit cannot be created, in my opinion, in any other way than by developing—through some method of the sort indicated—a set of common understandings and ideals. If it then be granted that students should share in the formulation of school ideals and the determination of school practices, it follows logically that they should be expected to co-operate in administration. This means not "student-government," but such reasonable, safe, and sane sharing of administrative functions as may be feasible in specific instances. Of course the extent to which students may be encouraged to participate in administration will vary with local circumstance.

SOME SPECIFIC PROBLEMS

Let us merely list some of the shortcomings which frequently exhibit themselves as problems: Overemphasis on athletics, especially interscholastic contests; overindulgence in other extra-curricular activities; magnification of fraternity-spirit or caste-loyalty at the expense of school-loyalty; lack of concern for the interests of the larger community; lack of the feeling of obligation to render to society a fair return for the benefits conferred by it upon the students; little concern for scholarship ideals; low ideals of industriousness; poor standards of honor; undemocratic attitudes; painfully inadequate recreation ideals and ideas; restriction of leadership opportunities to the few fortunate ones; failure to discover and bring to fruition much latent talent. Many other shortcomings might be indicated, which, like these, are "student-body problems."

A FEW SUGGESTIONS REVIEWED

It may not be amiss to review some of the ways which have been found helpful in meeting the difficulties inherent in high-school situations. Athletics will perhaps never shrink to its proper importance in the eyes of students, but other activities may grow into proper recognition when deliberate effort is made to set forth their merits. Frank discussion in student groups of the merits and deficiencies of all phases of school activity, scholastic and extra-curricular, is useful. Many of the evils which seem at times almost inseparable from interscholastic athletics can be averted in this manner, for the spirit of a school can be led—through co-operative consideration—to admire and practice the good features and abjure the evil ones.

Eligibility requirements for participation in any school activity should be expressed not merely in terms of "hours passed" but also in terms of effort, attendance, attitude, general school citizenship; by this means real emphasis is given to the idea that the school is to be represented only by "representative citizens."

In schools which suffer from the presence and activities of cliques and factions, unity of spirit may be fostered through inter-society combinations, "Boosters' Clubs," or all-school organizations.

A feeling of responsibility for general community welfare may be fostered by the organization of a committee whose business should be the discovery of ways and means by which the school can co-operate in community enterprises. Every school organization should include general community welfare among the objects for which it exists. A tax of ten per cent might well be levied upon all proceeds of school enterprises, for the creation of a fund to be expended as the contribution of the school toward the objects for which the town or community is expected to raise money. This process of "tithing" would serve to emphasize the reality of social obligation.

If "scholarship" is ever to assume, in the minds of students, its rightful preeminence among secondary-school ideals, it must receive recognition paralleling that currently given to successful endeavor in athletics. Publication of comparative standings, honor societies, awards, inter-class or inter-society scholarship trophies, additional representation in the "School Council" to groups excelling in scholarship,—these and other means have proved effective. Many schools commit a grave error by the practice of exempting from examinations those who attain high grades in their daily work. We do not train athletes that way; we do not insult the football team by urging them to practice faithfully in order to avoid the necessity of playing the Thanksgiving game! But we do insult scholarship aspirants by urging them to work hard in order to escape a test of their mettle. Examinations ought to be considered a privilege to be earned, not a penalty to be avoided. Is there anything essentially grotesque in the idea of interscholastic competition in scholastic achievement? Could not groups of thinking "educators" devise plans under which sane competition would be feasible? Is it unthinkable that in due time a scholarship "letter" might come to be almost as honorable a possession as an athletics trophy?

The recreation problem is one to tax every resource of a highly developed school morale. It is hard to say which school is in the

more difficult position,—the one which permits the dance, or the one which forbids it. Surely the modern type of dancing must be strictly supervised, for it is all too frequently done in most barbarous fashion. The most serious drawback of the dance as a form of school recreation is its tendency to crowd out everything else. It ought, if permitted at all, to be allowed to form only a part of any social afternoon or evening. Other forms of entertainment should be equally prominent. Those schools in which dancing is taboo are of course under necessity of substituting something else, for it seems that a high school must be to some extent a "recreation center." The various organized groups within any school should be able, under skilled adult direction, to take their turns at providing entertainment for the social hours. The school is not meeting its obligation to train for "worthy use of leisure" unless it provides opportunity for students to learn how to play.

Some of the most perplexing problems are those which arise in connection with the effort to educate students through participation in organizational activities. How to give everyone some chance to practice leadership, how to eliminate too much "politics," how to make certain that the "good citizenship" of the school dominates in organizations, how to prevent students from overloading themselves with extra-curricular responsibilities, how to discover and exploit hidden talent, how to limit the financial burdens, how to make the school paper a vital force in the development of morale,—these and many similar problems give the administrator of the modern high school plenty to think about.

Everyone should have opportunity to take some part in organization life. Some will find their chance in the clubs which spring up in connection with subjects of study; others, in social clubs or "fraternities" (whether so named or not); still others may never find other opportunity than that provided by membership in a home-room group or in a class-organization. One may practice leadership through being permanent chairman of a recitation-section, others through the rotating responsibility of the "socialized recitation." If the large class organization is to offer leadership training to more than the few officers, then it must be divided into "tens" or "twenties" for activity purposes, each member of such a sub-group taking his turn at the presidency of his group.

Politics can be "purified" and good citizenship stressed by the insistence upon eligibility requirements of significant character. The

boy or girl who is not a good "school-citizen," not a fair representative of the school's ideals, ought never to be allowed a candidacy for any position of trust or responsibility.

Overloading a student with extra-curricular responsibilities can best be prevented by limiting him to active participation in not more than two or three organizations, the number depending on his scholarship standing. He might be allowed associate membership in more groups. A "point-system" of official responsibility, limiting the number of offices which one student might hold during his career, will also help to unburden some of the more active students; it will provide, too, for a wider distribution of leadership opportunity.

There should be a registration of talent, so that the resources of the students for entertainment and recreation purposes may be available. Those who have special abilities and talents should be encouraged to admit the fact, modestly, and it should be a matter of record. Students who know of the talents of others ought to report the facts.

A survey should be made in every high school to discover the amount of money that each student needs to spend throughout the school year in order to be an active participant in school activities. The figures would doubtless be startling; and they would be likely to stimulate the cultivation of thrift.

The weekly school paper, to be an effective force, might very wisely be published by a regular composition—or journalism-class, the members selected by competitive examination—an examination designed to discover news-getters as well as news-writers. Every student in school ought to receive the paper, and it ought to be read and discussed regularly in home-room or other groups.

ONE OUTSTANDING PROBLEM

One very special problem in organization is the "fraternity" or exclusive group. The secret society is of course outlawed in many states, and should certainly be taboo in every high school. But the tendency to organize into close social groups is in the folkways; and it would seem the part of wisdom to capitalize this tendency rather than seek to crush it. I shall state here what seem to me to be fundamental principles in the organization and management of "exclusive" societies. In schools where societies already exist and are in need of reform, I should suggest that the program of modifications be worked out with the organization rather than handed down ex-cathedra.

1. Adequate supervision by sympathetic, social-minded faculty members is the first consideration. The high school as a whole is a co-operative enterprise, and so every group within it ought to embody the idea of faculty-student cooperation.

2. The charter or constitution of each society should specify among the objects of the organization, devotion to the larger aspects of general school and community welfare. Indeed this should come first. Emphasis on these ideals will help to prevent group-loyalty from overshadowing the larger loyalties.

3. The avowed purposes of the organization should include some very definite types of activity—literary, dramatic, debating, scientific—any or all of these and others. Social, political, and general “boosting” activities may have large place, but ought not to dominate. In following out the constitutional emphasis on larger loyalties, the society should expect to serve the school in many definite ways, such as furnishing assembly programs, establishing and maintaining high scholarship ideals, and in general accepting large responsibility for helping develop high morale in the school.

4. Membership should be limited in number. New members should be elected by majority vote of the society, or perhaps by two-thirds majority; but in any case it should not be possible for one or two adverse votes to keep a person out. New members ought to be chosen from a waiting list of eligibles, which should include only such people, of not less than second-half sophomore standing, as can obtain a recommendation from the faculty for good “school-citizenship” and at least fairly respectable scholarship record. It might be well to require further that candidates for election to societies should have acquired a reasonable number of “achievement points,” to be awarded for high standing in scholarship, conspicuous support of school or community enterprises, acts or conduct meriting special appreciation, special distinctions of any sort. The standards should be such as could be reached by any good citizen of average intelligence and ordinary enterprise, so that promise is recognized rather than merely achievement. Selection of members should occur at not too frequent intervals, say once a semester.

5. “Once a member, always a member,” should not be the rule. Members should continue to earn achievement points in order to be allowed to remain in the society. Dead timber must be eliminated, and the feeling of self-satisfaction over having been “taken in” must

be replaced by a feeling of responsibility for continued effort and contribution.

6. The educational value of the intra-society programs (literary, dramatic, etc.) will, of course, depend largely upon the character of the faculty supervision and the general morale of the society. These programs should be supplemented by occasional meetings at which alumni or other adult citizens make real educational contributions in the way of inspirational or vocational talks. Father-and-son meetings at suitable intervals will be of great value.

7. Scholarship ideals may become vital in a society through strict enforcement of membership and office-holding eligibility requirements, through intra-society scholarship medals or other recognitions, through publication of comparative standings of different societies, through a scholarship committee or proctor, and through the giving of additional representation on important all-school committees or councils to the society with highest standing. But no group-standing of less than "B" ought to be considered worthy of such special recognition.

8. There should be very definite limitation of the financial obligations of membership. We do not want "millionaire clubs" in high schools.

9. Provision should be made for a suitable amount of ceremonial in connection with initiation and occasional "consecration" meetings.

10. The relations between rival societies and between societies and the non-society people call for some consideration. The conception of faculty-student co-operative school administration requires that all students shall have some opportunity to participate. One way of accomplishing this is to provide that important enterprises shall be conducted by committees or councils composed of one representative from each society and as many non-society representatives as the non-society population is entitled to in proportion to the society population. This plan does away with objectionable policies, inter-society bitterness, "fraternity vs. barb" spirit. It also secures able committees, for each group naturally chooses its best citizens for important school positions. Other ways of diminishing the bitterness of inter-group rivalry may be found in providing frequent opportunity for inter-society co-operation in special enterprises, such as joint programs, inter-society "feeds," co-operative "drives."

11. One point remains. Which society shall be considered the

"best" in a school? Comparisons are odious, but as long as folks are human, comparisons will be made. Would it not be well to work out what might be called an "Index of Organization-efficiency," and use it as a basis for giving official recognition to the group making the most satisfactory showing? In working out the index, varying weights should be given to the various types of scholarship, extra-curricular and community activities represented. Let the faculty, or the faculty and student-body jointly, provide a suitable trophy to serve as a constant stimulus to society endeavor.

It seems to me that the foregoing principles, if put into operation, would transform high school societies, clubs, or fraternities into constructive forces.

SUMMARY

"Morale" is the one, all-inclusive student-body problem. Morale can be created and developed only through the sympathetic co-operation of faculty and student-body in the formulation of school ideals (general and specific) and the determination of school practices. There are many specific practices which will serve to ameliorate conditions, all depending for their complete success upon the development of high morale. One outstanding student-body problem—that of the "fraternity" or exclusive social group—is capable of solution; such societies can be made constructive forces.

A paper on *The High-School Principal from a Teacher's Viewpoint* was given from brief notes by MR. R. N. KETCHAM, OAK PARK-RIVER FOREST TOWNSHIP HIGH SCHOOL, OAK PARK, ILLINOIS.

THE HIGH-SCHOOL PRINCIPAL FROM A TEACHER'S VIEWPOINT

MR. R. N. KETCHAM

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The aspirations of the real teacher are the same as those of the real principal, namely, such relation between teacher and principal that the exercise of other combined abilities will bring to the school and the community they serve the greatest possible benefits. We are not now interested in the teacher or the principal who is willing, for

personal gain or satisfaction, to put into operation plans and suggestions that cannot operate to the advantage of the school organization.

We as teachers have a genuine satisfaction in the success of the school system of which we are a part. We take pride in its progress and are willing to give our best efforts to aid in attaining this end. We hear enough to know that at times we fall far short of what is expected of us. But we hear less about the proportion of the success or failure that is due to the administrator. It is discussed by ourselves very little, possibly because it is too intimately connected with our professional and financial rating.

To obtain the greatest measure of success from the agencies at his command, any principal must measure well up in those qualities and requisites of a real leader. It is the lack of some of these qualities—sympathy, courage, fair-mindedness, willingness to compromise, far-sightedness, ability to weigh facts and happenings and give them their proper value; or, the possession of some of them in too slight a degree, that accounts for most of the trouble and most of the failure of school administrators. Many a good faculty has become antagonistic because of unfair actions on the part of the principal. Many a teacher and faculty have withdrawn a loyal support from a principal who thought more of politics and policy than he did of standing squarely back of a teacher who was in the right. Many a principal has had what might be termed a migratory organization because of his inability at times to concede gracefully that he might be wrong.

Few faculties can be so exceptional as to accomplish ends greater than those to which their principal can lead them. On the contrary, it is only logical to expect that the accomplishments of faculty, student body, and community, will fall short of the expectations as measured by the principal's leadership ability. Every faculty, student body, and community, after a period of study of a principal, rank him according to his ability as a leader. The qualifications considered by each of these groups, in arriving at their conclusions, are in my mind very closely approached in an article recently written by one of the foremost financial writers of the day. He says:

"During the past few years I have been analyzing the characteristics and assets of America's great captains of industry. In the beginning of the investigations I thought that the important things of business were capital, technical training, physical endurance, and those other material forces which we so much seek. Careful study,

however, convinces me that these tangible factors are of little value. The real assets possessed by our captains of industry are the so-called intangible assets, among which are, thoughtfulness, kindliness, sympathy, hopefulness."

Again he said:

"The real assets of every successful bank are not the securities in the vaults, but the hospitality personified by its officers and employees."

An analysis of these ideas gives rather accurately the ground a faculty covers in arriving at its working relation of principal and teachers. Exceptional educational advantages, unusual intellectual accomplishments, superior ability as a teacher, without the fundamental qualities which we have mentioned, never built up or held together a faculty or any other working organization. But having these to a moderate degree, with a fine balance of the human qualities, has made many an unusual faculty.

The greatest number of failures of principals is due to their lack of accurate interpretation and to unskillful handling of those human situations which, unimportant in themselves, are at the bottom of most schoolmen's troubles. For instance, my observation has led me to conclude that many principals have forgotten the time they as teachers took up their work in new positions. They came to those positions with new hopes, a determination to execute all its duties to the satisfaction of their superior. It is only natural that we as teachers should come in that same spirit. It is exceptional though, if during this probationary period a teacher discovers what satisfies the principal. It makes little difference how many years of experience a teacher may have had. They all have about the same problems. They are all anxious to know the problems they are to meet and the best possible approach to them. They know that two student bodies, two communities are not the same. They want to know how the student body reacts to certain situations, to what they are accustomed to react; how the community looks upon certain problems; all of which the principal knows better than any one in the school system. Teachers in many systems feel that after a few weeks of work a conference for constructive criticisms is due them. It would give a courage and definiteness to their work which many do not have now. As it is, a large percentage of teachers report that they work a year or more with little certainty as to how nearly they have filled the position they were expected to fill. The positive effect

it may have is illustrated by the experience of one of the Oak Park teachers. The direct commendation given on three occasions early in her work there, as to the place she was filling in the system, has had a continuous positive effect on her work. The general opinion among teachers seems to be that they welcome more constructive criticism from school administrators.

It is an exceptional principal, who when problems intimately related to his position, are passed to the board, is not curious, even anxious, to know just how and why they took the action that they did. I have seen times when a principal did not rest easy until he had obtained this information. That is only natural. But if natural with a principal, why not natural with a teacher? However, it seems to be a common practice of principals to take problems passed on by teachers, settle them, and turn back no report to the individual presenting the problem. From the teacher's viewpoint it seems the losing of an opportunity by the principal to do constructive work from a number of angles. For the experienced teachers who feel competent to deal with most school problems, it may help to continue a co-operative relation, and even give them ideas as to other methods of handling problems. There are instances when this indirect method of conveying this information may have its place. For another type it makes possible commendation if the problem has been well managed up to the time it comes to the principal; with the result that it encourages the teacher to handle more problems in the same manner and gives courage to use initiative in other problems. In case it has not been well handled, it offers an opportunity for sympathetic, friendly instruction as to how it might have been dealt with. If the principal is dealing with a real teacher, the same type of problem will be better disposed of next time, and the principal will have gained in establishing a better relation between himself and the teacher. In any case the teacher has not been left in doubt, a condition which gives rise to many misunderstandings and wrong inferences from which develop some of the situations which disturb the peace of mind of principal and teacher. Many may raise the objection that most principals have all they can do to handle the problem without reporting back. From observation in watching the administration in our own school, my conclusion is that it can be done and the returns are ample compensation for the time it takes; it being the policy of the principal to keep his teachers informed. If in no other way it goes far toward keeping a friendly

co-operative relation between an administration and teacher ; which, in the teacher's mind is very valuable. It must be that all principals do not agree that this relation is to be cultivated, for in questioning teachers from a variety of schools, a high percent stated that in their experience there seemed to have been a studied policy on the part of the principal to establish an atmosphere about the office seemingly to discourage a cordial relation. This should not be necessary, for the most successful executives in any line of business are those that have a truly friendly relation to their subordinates.

Rather a high per cent of school administrators seem to have as a working basis that oft-repeated statement: "If you want a thing well done, do it yourself." This statement applied to a military leader might lead us to the conclusion that if he wanted the cannon polished, to have it well done, he must do it himself. It may be possible that that is the only way to get it well done, but we have come to think of a great leader as one able to get his subordinates to carry out—cheerfully, loyally, and completely to his satisfaction—routine duties as outlined by himself, while he is busy studying and directing the larger problems of the campaign. We have come to measure the possible success of a leader as directly in proportion to the loyalty and enthusiasm of his subordinates. And yet, only recently I questioned one of our men who came from one of the large schools in a neighboring state, as to the intensity of supervision by the principal. His answer was that they were not even permitted to count the money taken in at athletic contests unless the principal were present. Again, very recently, while attending a meeting of principals, discussing this subject, they seemed to take as logical an explanation given by a very successful schoolman as to how he happened to turn over to some of his faculty the control of some of the school activities. His explanation was, that it had to be done because the growth of the school made it impossible for him to attend to them all.

This condition may be necessary from the principal's standpoint, but I doubt if most faculties will agree. It does not seem logical that the principal can do all things better than some members of the faculty can do some one thing. It does not seem logical that the principal can direct the clubs, the general policy of athletics, take charge of the publications, direct the social activities, better than some of the members of his faculty. It may be that there is a question

of doubt as to whether it can be done; whether the teachers will assume a responsibility for the actions taken, or will conduct them and permit the administration to shoulder the responsibility. There may be a question as to whether a group of teachers given this much responsibility will not gradually encroach on the rights and duties of the principal.

The answer, I think, is contained in what I heard a school man of some twenty years' experience say the other day, in speaking of a certain student body. He said: "Had you told me some time ago that a student was to conduct that assembly I would have told you that there would be a riot. Now I see that assembly conducted time and again and no one could ask that it be done better." He went on to say that he realized that some hard work had preceded to prepare the student body to assume the responsibility. Having attained that foundation there was much to commend the system. Certainly it was far superior to the type where the administrative direction and control is very evident. The students realize the responsibility and take pride in measuring up to it. More assemblies are conducted in the Oak Park schools by students than by the principal, and practically all of the big problems, like the smoking of cigarettes, have been handled by the student body. They have been handled with so little evident direction by the principal that few of the faculty could, if asked, outline the machinery by which it was accomplished. This has all been accomplished by the principal through a definite policy of educating the student body. In no case has it led to the assuming of greater powers than those given them, but rather has tended to make them more responsible as individuals and as a student body.

It is a system that permits growth through the exercise of ability. Yet in a meeting of principals not very long ago there seemed to be a great question as to whether the field of activity of a teacher could to advantage be extended beyond that of the classroom. With the same type of direction extended to a faculty, as given the student body referred to, is it not fair to expect similar results?

I have never seen a real principal who did not enjoy leaving his desk to meet for an hour or so with a committee of citizens or some group dealing with problems not directly connected with his school work. He returns refreshed and attacks his problems with renewed vigor. But the system under which many teachers work

seems to be established on the principle that in their case the way to get enthusiasm and development is to confine the teacher to class room activities, at times under conditions that do not permit the exercise of their ingenuity and originality, even in that limited sphere. It is difficult for teachers to see how they can develop if much of their thinking is done for them.

We as teachers do not object to leadership. The real teacher does not advocate changes with the hope that some of the authority of the principal will be delegated to him. At all times we are interested in the success of our school; we are interested in giving the best service to the community; and even more are we interested in giving our best service to the students with whom we are associated. We welcome constructive criticism from school administrators. We desire as much as the principal that there be complete co-operation of principal and faculty, for we appreciate that our success and advancement are intimately connected with that of the principal, but even more important because of the satisfaction derived from working in an atmosphere where complete co-operation exists.

MR. EDWARD RYNEARSON, PRINCIPAL OF FIFTH AVENUE HIGH SCHOOL, PITTSBURGH, PENNSYLVANIA, presented a paper on *The Value of an Honor Society in High School*. He followed this paper by a report on the *National Honor Society of Secondary Schools*.

HONOR SOCIETIES OF SECONDARY SCHOOLS

PRINCIPAL EDWARD RYNEARSON

FIFTH AVENUE HIGH SCHOOL, PITTSBURGH, PENNSYLVANIA

Another high school club. "Our pupils are nearly clubbed to death now." True, there are many clubs but they usually indicate life rather than death. Clubs let loose will stop the progress of any high school as they do of some communities; but rightly guided and guarded they may become the means of intellectual, civic, and moral uplift of the student body. This is the period of life when organizations make a strong appeal. Clubs or societies have been formed for nearly every activity, real or imaginary, in the high school. The badges and other insignia are often objects of envy to outsiders. The athletes have been called up before the school, given their letters, and crowned in the presence of the rooters. Their names often appear in big headlines in the town or city papers and

are sent to the colleges by loyal alumni. The members of the debating teams appear on the public platform in their respective schools. Those active in literary societies come before the school on many occasions. Pupils interested in music represent the school in the chorus or orchestra. The school plays offer opportunities for those with histrionic ability to appear before the public and to receive the applause of the school and glowing accounts in the newspapers.

These various activities hold the center of the stage in school life but pure scholarship unfortunately is not often on the list. For some time educators have felt the need of some definite recognition of, and incentive to, real scholarship in our secondary schools. Secondary schools, public and private, all over the country have made more or less feeble attempts to recognize the pupils who stood high in their classes by such methods as posting the names in the main corridor, granting special privileges or credits, excusing earlier from school, giving badges, hanging a pennant or banner on the door of the room whose pupils have achieved the high standard, sending letters of congratulation to the parents, or giving special mention at commencement. These were the methods of individual schools. In many instances the schools of a certain type (preparatory) or district (city high schools) united and agreed upon the same standard of scholarship and similar methods of recognition for the entire group of schools. Thus the honor society had its birth.

So far as I can determine, the first scholarship honor society (Phi Beta Sigma) was founded in 1900 by Dr. Wm. B. Owen, of the Chicago Normal School, when he was principal of the old South Side Academy.

This new society supplied the long-felt need and was intended to do for this school what Phi Beta Kappa was doing for the colleges. The idea spread rapidly and honor societies sprang up all over the country. The Cum Laude Society was founded in 1906 at the Tome School, Ft. Deposit, Md., under Dr. A. W. Harris. At first it was called the Alpha Delta Tau Fraternity, but the name was changed to avoid confusion with the Greek-letter fraternities of an entirely different character. The Oasis Society was also organized in 1906 in the Polytechnic Preparatory Country Day School of Brooklyn. Next came the Arista Society, which was organized in January, 1910, by the late Dr. W. B. Gunnison of the Erasmus Hall High School, Brooklyn. In the same year the students of the Manual Arts High School of Los Angeles, California, suggested some recog-

nition for those who were not members of the dramatic, athletic, or musical organizations of the school. The Mimerian Society was the result. The movement spread to Long Beach in 1913 and elsewhere in California and recently, according to a letter from Principal Burchman, of Long Beach Polytechnic High School, the California Scholarship Federation of thirty-five high schools has just been completed. In 1916 the Pro Merito Society was established by thirty or more head masters of western Massachusetts and at present about seventy-five high schools have established chapters. In 1917, at the suggestion of Dr. Shiels, Superintendent of Schools of Los Angeles, California, the high-school principals petitioned the board of education to organize the Ephoebian Society, the membership to be composed of graduates from the different high schools who have stood among the first ten per cent on the basis of scholarship in their respective high schools.

Doubtless many other similar societies have been organized but these suffice to show that the need of recognition of scholarship was felt from Massachusetts to California.

Naturally societies in so widely separated localities would be formed to meet the local need. They will, therefore, vary widely in purpose and in governing rules. The Arista Society of New York City will serve to illustrate the general character. At present twenty-two high schools of Greater New York have chapters and three others have modifications of it.

Each chapter is governed by two distinct bodies: the senate and the assembly, and is under the absolute control of the principal. The senate is composed of the teacher members selected by the principal and varies in number according to the size of the faculty. The assembly is made up of students who have been selected in accordance with the constitution.

When a new chapter is installed the senate prepares a list from the members of the third and fourth year classes, stressing with equal emphasis the following elements: character, scholarship, and ability to serve, as determined by the pupil's record in the first and second years of high school. No pupil's name is placed on this list unless he has had in scholarship a mark of 70% in all his prepared subjects during the term previous to the election. The schools vary in regard to scholarship requirements. When the list of those eligible from the standpoint of scholarship has been prepared, many schools ask all teachers who have had anything to do with the pupils to make

comments upon the various members of this list from the standpoints of character and ability to serve, so that the senate can again revise the list and eliminate from it all that are objectionable from the standpoints of character and school service. This revised list will then include the names from which the senate will elect the assembly. At succeeding elections the senate prepares a list of eligible pupils to be submitted to the assembly for them to vote upon and to select the new members of the assembly.

The Arista pupils have been found effective in serving on monitorial assignments, in coaching deficient pupils, in editing the school handbook, and in performing such other honorable school service assignments as may be made by the principal or the vice leader in charge of the senate.

Most of the high schools of New York City have also introduced a Junior Arista for the pupils in the second, third, and fourth semesters. This arouses an interest in the Senior Arista very early in the high-school course and emphasizes scholarship, character, and ability to serve as the main elements of an all-round high school citizen. The Junior is simply a modification of the Senior Arista, suited to the pupils in the schools. While the teacher in charge of the senate may supervise this group, there should be a separate assembly.

The various societies which have been formed throughout the country are in general similar to the Arista; their differences are largely in details of management. Perhaps it may be well to note some of these differences.

The Cum Laude Society is found mainly in private schools although during the past year it has established chapters among some of the most prominent high schools. This society stands essentially for scholarship.

The Pro Merito Society is found only in Class A secondary schools of Massachusetts. Like the Cum Laude Society scholarship is the principal requisite for membership.

The Oasis Society is practically a senior society as only five members of the junior class are eligible and these are not selected until after Easter. The members are chosen by the point system; i. e., so many points for an editorship, team captain or manager, public declamation or oration.

The Mimerian Society is a scholarship organization. To be eligible a pupil must have four A's in subjects yielding four credits in any one semester.

The Long Beach Scholarship Society wishes to reward effort on the part of the average pupil. Membership is determined by the number of points made in certain outside activities together with those made in scholarship. Those pupils who succeed in maintaining membership in the society during eleven quarters, two of which have been in the senior year and one during the last quarter of the year, will have the Honor Scholarship Seal imprinted on their diplomas and college certificates. To attain to this recognition the high standard must be maintained to the very end of the course.

The Seal of the Soldan High School (St. Louis, Mo.) is awarded to pupils who distinguish themselves in some extra-curriculum activity and have done something for the school. While no scholarship standard has been fixed the faculty may protest those who have neglected their school work in their zeal for their clubs or who have shown poor citizenship by their general school character. Dr. Powell, the principal, writes that Soldan will continue the award of the Seal along with the scholarship society. A visit to Soldan convinced me of the great value of the Seal in emphasizing various abilities of high order as revealed in the members of the twenty-five school organizations.

The Ephoebian Society is a graduate organization formed to discuss questions of civic interest at the annual banquet with the high school principals, superintendent, and members of board of education. Dr. Shiels did a wise thing to enlist the services of the coming leaders in an organization that will repay the community in better citizenship and cleaner living for the opportunities that have been given them in the schools.

As you have read over the objectives of the various societies you are convinced that with some slight differences in government, etc., these societies have as underlying principles, character, scholarship, leadership, and service. Only two of the above societies, the Cum Laude and Pro Merito, have scholarship only as the basis for membership.

Do these various societies meet the need? The founders or high officials of these societies who have watched the development from the beginning are most competent to answer the question. Dr. Owen says: "I have not been disappointed in the value of the work of the society. I did not expect that such emphasis as this association could bring would offset the natural enthusiasm for those who excelled in athletics, nor the ambition of the normal boy to win dis-

tion in athletics. I feel, however, that a formal public recognition by the school of those who were distinguished in other school work would call attention in the right way to the importance of scholarship. This result happens wherever the society exists. I believe the students and the faculty approve of such a society."

William E. Golden, founder of the Oasis Society, says, "All the boys of the school are eager for the honor of election and work for it. Athletes discover that they can speak, and grinds that they also are athletes. All of this seems to us to be highly desirable."

J. D. Dillingham, principal of Newtown High School, who is the present president of the Arista Principals' Council, says: "In all my experience with student organizations I feel justified in saying that this is the best kind of high-school honor society that I have been able to find. In Newton High School we feel that we are devoting a great deal of time and thought to the emphasis of scholarship, and one of our most effective agencies in this kind of scholarship has been the Arista. Our local colleges are taking Arista membership and service into account in the award of scholarships and other college honors."

NATIONAL HONOR SOCIETY

Have you been impressed with the fact that honor societies sprang up in so many widely different sections independently and almost simultaneously? If the many-chapter society commends itself to the schools of a certain district because each is helped by the other, a nation-wide society ought to be a stronger organization and receive the support of all schools that believe in such societies. Will not one common badge for the entire country be more valuable than many different local badges? In other words, if the fundamental principle of the honor society is sound, it should be national in its application; a National Honor Society of Secondary Schools is a logical outgrowth of the wisdom and experience of the past fifteen or twenty years.

When the principals from all sections of the country come together at the annual meeting of the National Association of Secondary School Principals they form a clearing house for the many new plans that are in operation in their respective sections. Naturally the honor societies came in for their share of discussion.

After a brief discussion at the Chicago meeting of the Association in 1919, Mr. J. G. Masters of Omaha was appointed chairman of the committee on a national honor society. A report accompanied

by an outline of a constitution was made the following year in Cleveland. The Association favored the formation and authorized the president to appoint a committee on constitution and organization that should make a report in 1921. The committee consisted of Principal J. G. Masters, Chairman, Omaha, Neb.; Principal M. Prunty, Tulsa, Okla.; Principal C. P. Briggs, Lakewood, O.; Principal Geo. Buck, Indianapolis, Ind.; Principal H. V. Church, Cicero, Ill., and Principal Edward Rynearson, Pittsburgh, Pa. Messrs. Masters and Buck were unable to be present at the Atlantic City meeting (1921) and Principal E. J. Eaton, Youngstown, O., and Principal M. R. McDaniel, Oak Park, Ill., were added to the committee which made a report that was adopted by the Association. A copy of the constitution is printed at the end of this article.

In drawing up the constitution the committee was faced with the necessity of providing an organization broad enough to meet all the varying needs of these numerous societies. Scholarship only seemed too narrow; where tried the society had, in the words of John Rush Powell, "got the stigma of being 'high-browish.'" On the other hand, there was great danger of cheapening it. After considerable discussion the committee fixed upon character, leadership, scholarship, and service as the fundamental virtues most useful to society, and therefore most worthy of encouragement. The constitution lays down general rules regarding officers, eligibility, etc., but, in the main, leaves the details of government to each local chapter. The authority is invested in a national council of ten members, including the secretary of National Association of Secondary-School Principals. The first council was appointed by Principal M. Prunty, president of the National Association of Secondary-School Principals.

An application from any secondary school for a charter must be accompanied by a check of five dollars and ten copies of the constitution of your chapter and sent to Secretary H. V. Church, Cicero, Illinois, who will send a copy of the constitution to each member of the National Council. Upon their approval the charter will be granted. More than fifty secondary schools have already filed applications.

The initiation exercises may be made the occasion of celebrating some school or town anniversary. What more appropriate way could the birthday of some national character, such as Roosevelt, be commemorated than by a study of a life that exemplifies those very virtues that are the objectives of the society! These exercises should

always be public in order that no one will confuse the society with a secret fraternity and that the school and community as a whole may catch the inspiration of higher ideals held up by the speakers. Again the parents of these selected pupils will be drawn closer to the school filled with a deeper appreciation of the work of their children. Being present at the initiation of their children into the honor society will be a highly prized privilege and reward to many parents who have watched their children carefully and prayerfully.

The charges given to the newly elected members should be based upon those traits of manliness and womanliness that are held up as the ideals in the school and in the home, for good citizenship, for successful lives, and for the highest spirituality. Indeed the entire program might profitably be built around the four objectives of the national society: scholarship, leadership, service, and character. It might be acceptable to many schools that these charges be put into a permanent form of ritual.

The program should be dignified and impressive throughout. The school at large will judge the society very largely by these public exercises. Here is a great opportunity to create an enthusiasm for scholarship among those who have not yet been awakened to the importance of a complete development of their higher powers. We shall never know how many real personalities have been lost who have all the native endowments of genius and leadership but who for lack of incentive or of proper environmental stimuli, have remained undeveloped and unknown. On the other hand, those who have been selected for membership should be made to realize that because of their conspicuous leadership, intellectual achievements, loyalty to high ideals, nobility of character, they are not to withdraw from the "mass" and form a "class," but that this added honor carries increased obligation, that unusual ability entails extraordinary responsibility; that they are greatest who serve most.

Will not the explanation of the torch as the emblem of the national society, held high by the arm of youth, be another opportunity

to inspire all the pupils with those ideals that challenge their highest and best powers?

"O young mariner,
Down to the haven,
Call your companions,
Launch your vessel,
And crowd your canvas,
And, ere it vanishes
Over the margin,
After it, follow it,
Follow the gleam."

In most of the societies the newly elected members are required to take a pledge of loyalty to the school and state. The Ephoebian Society of Los Angeles, California, uses the Athenian oath of allegiance to the state—an oath which familiar though it may be, will bear repetition here, for it indeed expresses the general purpose of this new Honor Society and the crying need of America: "We will never bring disgrace to this our city by any act of dishonesty or cowardice, nor ever desert our suffering comrades in the ranks; we will fight for the ideals and sacred things of the city, both alone and with many; we will revere and obey the city's laws and do our best to incite a like respect in those above us who are prone to annul or set them at naught; we will strive unceasingly to quicken the public sense of civic duty. Thus, in all these ways, we will transmit this city not only not less, but greater and more beautiful than it was transmitted to us."

CONSTITUTION OF THE NATIONAL HONOR SOCIETY OF SECONDARY SCHOOLS

Revision of March, 1922

ARTICLE I

Name and Purpose

SECTION 1. The name of this organization shall be the National Honor Society of Secondary Schools.

SECTION 2. The purpose of this organization shall be to create an enthusiasm for scholarship, to stimulate a desire to render service, to promote leadership, and to develop character in the students of the American secondary schools.

ARTICLE II

General Control

SECTION 1. The general control of this organization shall be vested in a National Council.

SECTION 2. The National Council shall consist of nine members elected by the National Association of Secondary-School Principals. The secretary of the National Association of Secondary-School Principals shall be a member, ex-officio.

SECTION 3. The nine elective members shall be chosen for a term of three years, three being chosen annually. Immediately after the first election they shall be divided into three classes for the one, two, and three-year terms.

SECTION 4. Five members shall constitute a quorum of the National Council.

SECTION 5. The National Council shall each year nominate three members to be elected by the National Association of Secondary-School Principals to succeed those whose terms expire.

ARTICLE III

National Organization

SECTION 1. This organization shall consist of chapters in the secondary schools of the United States, supported by public taxation or endowment, with standards equal to those accredited by such agencies as the North Central Association of Colleges and Secondary Schools, the New England Association of Colleges and Secondary Schools, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the Southern Association of Colleges and Secondary Schools.

SECTION 2. Each chapter, before its admission to the National Honor Society, shall have its organization approved by the National Council.

SECTION 3. Each chapter shall, for continued membership, conform to all rules of the National Council.

ARTICLE IV

Emblem

SECTION 1. This organization shall have an appropriate emblem, selected by the National Council and this emblem shall be uniform throughout the United States.

SECTION 2. This emblem shall be copyrighted.

SECTION 3. The distribution of the emblem shall be under the exclusive control of the National Council.

ARTICLE V

Dues

SECTION 1. Each chapter of this organization shall contribute whatever amount may be assessed by the National Council, not to exceed five dollars (\$5.00) annually.

ARTICLE VI

Membership

SECTION 1. Members of chapters shall be known as active and graduate.

SECTION 2. Membership in any chapter shall be based on scholarship, service, leadership, and character.

SECTION 3. Candidates eligible to membership in a chapter of this organization shall have a scholarship rank in the first fourth of their respective graduating classes.

SECTION 4. To be eligible for membership the student must have spent at least one year in the secondary school electing such student.

SECTION 5. Not more than fifteen per cent of any senior, or graduating, class shall be elected to membership in a chapter.

SECTION 6. The election of not more than ten per cent may take place during any semester after the beginning of the seventh semester of secondary-school work in which the standards for election have been attained. The remainder may be chosen during the last semester before graduation.

ARTICLE VII

Electors

SECTION 1. The election of members in each chapter shall be by the faculty, or by the principal and a committee of four or more members of the faculty whom he may select.

ARTICLE VIII

Officers

SECTION 1. The officers of each chapter shall be a president, vice-president, secretary, and treasurer.

SECTION 2. The secretary shall certify to the National Council the number graduated in each class and the names of those elected to membership in the chapter.

ARTICLE IX

Faculty Supervision

SECTION 1. All meetings shall be open meetings and shall be held under the direction of the principal or of some member of the faculty selected by him.

SECTION 2. The activities of the chapter shall be subject to the approval of the principal.

ARTICLE X

Executive Committee

SECTION 1. The Executive committee shall consist of the officers of the chapter and the faculty sponsor.

SECTION 2. The Executive committee shall have general charge of the meetings and business affairs of the chapter, but any action on the part of the Executive committee shall be subject to review by the chapter.

ARTICLE XI

Amendments

SECTION 1. This constitution may be amended at any meeting of the National Council, or by mail by an affirmative vote of seven members.

MR. C. W. WHITTEN, PRINCIPAL OF DEKALB TOWNSHIP HIGH SCHOOL, DEKALB, ILLINOIS, gave a committee report on *Standardizing and Making Uniform Teachers' Marks*.

REPORT ON STANDARDIZING TEACHERS' MARKS

The following report includes:

- I. The results of a questionnaire investigation of the present status of the movement among high-school teachers and administrators in the direction of standardizing teachers' marks.
- II. Some recommendations of the committee relative to certain aspects of the problem.

Prepared under the auspices of the National Association of Secondary-School Principals and submitted to that body at its annual meeting in Chicago, Illinois, on March 2, 1922.

The committee:

C. W. Whitten, Principal DeKalb Township High School, DeKalb, Illinois.

G. W. Willett, Principal Lincoln High School, Hibbing, Minnesota.

J. H. Brenneman, Principal Ottumwa High School, Ottumwa, Iowa.

A. A. Rea, Principal West High School, Aurora, Illinois.

THE QUESTIONNAIRE

The committee deems it unnecessary to reproduce the questionnaire. A perusal of this report will reveal its general purport and scope.

The questionnaire was sent to approximately 500 of the leading high-school principals in the United States. No state was omitted from the investigation. Copies were sent to all members of the National Association of Secondary-School Principals insofar as their names and addresses were available to the committee. In addition, copies were sent to many other high-school principals who, because of their position or reputation, were believed to be able to render assistance to the committee along the lines of investigation attempted.

REPLIES

Replies to the questionnaire were received from 262 high school administrators representing a total enrollment of more than 260,000 pupils. The committee believes that so generous a response insures a fair degree of accuracy in the determination of the present status of the "marking" problem. Questionnaires were sent to schools of all sizes and replies were received from schools varying in size from 48 to 3,468. That the average size runs so high, over 1,000, is due to the very generous response from the principals of the larger schools.

The reader will understand that whenever the number of schools reporting on any aspect of the questionnaire is less than the total number of schools reporting it is due to the fact that some principals either omitted replies to the question in hand or that the reply was so indefinite that the committee was unable to determine the exact classification.

THE RESULTS

PART I

The first portion of the questionnaire has to do with the systems of marking in common use with relation to the symbols used, passing grades, etc. The investigation reveals:

1. One hundred and fifty-six schools having 175,000 pupils use some form of group system of marking: 103 schools having an enrollment of 85,000 use a percentage system.

2. Of the schools using group systems, 102 use "pure symbols" such as "A, B, C, D," or "1, 2, 3, 4"; 54 use "significant symbols" such as "S" for "Superior," "E" for "Excellent," "VG" for "Very Good."

3. Of the 156 schools using some form of group system of marking all but a dozen have specific "translations" into the percentage system. Thus, in most cases, "A" means "90-100," etc. Only about a dozen principals out of the entire 262 reporting say that they try to get away from all thought of "percentages" in assigning their pupils to any group.

4. Seventy or seventy-five per cent constitutes the passing mark in seven-eighths of the schools reporting whether using a group system or a percentage system of marking. Four schools report 50 per cent as the passing mark, one 55 per cent, fifteen 60 per cent, nine 65 per cent and three 80 per cent. The schools having the lower passing marks are practically all east of the Alleghany Mountains.

PART II

The second portion of the questionnaire has to do with the distribution of the marks. From this study it is learned that:

1. Eighty-four schools having an enrollment of 81,500 require some more or less definite distribution of marks according to some specific scale; 172 schools having an enrollment of 178,000 pupils have no such definite distribution of marks.

2. Of the 84 schools reporting a definite distribution of marks, 67 report that they demand, expect, or recommend a distribution in accordance with the "normal frequency" curve.

3. Ninety-five schools require each teacher to summarize her marks at the end of each marking period and all of these report that the principal or some supervisor examines and discusses this sum-

mary with the teacher. Seventy-six schools require the graphing of the marks and a comparison of the results with the "normal frequency" curve.

4. Of the 93 schools using one or more of these devices for securing uniformity, 83 report that it has resulted in improvement in the distribution of marks. The average period the plan has been in use in the various schools is slightly over three years, indicating that the plan is still in its infancy.

5. Of the 84 schools reporting some definite scale of distribution of marks, only 50 included such a scale with their replies. The 50 schools thus responding sent in 32 different scales showing that there is nothing like standardization of practice in this line. It is manifestly impossible and undesirable to include all of the 32 different scales in this report. Most of the schools, 32 out of the 50, employ a five-group scale. The particular scale employed most frequently is one worked out by Dr. H. O. Rugg several years ago and is as follows: The highest group to include 7 per cent of the whole, the next group 24 per cent, the median group 38 per cent, the lowest passing group 24 per cent and the failing group 7 per cent. This scale is used in eight schools. Another five-group scale used by four schools provides for a 5-20-50-20-5 per cent distribution.

Of course, it should be understood that no principal demands a fixed distribution in accordance with any scale. These scales are merely given as guides to the teacher and any wide variation from them must be explained.

6. Of the 84 schools reporting that they attempt a definite distribution of marks only 24 report that they provide teachers and pupils with a specific statement of the requirements for each group. That is, only between 9 and 10 per cent of the schools responding to the questionnaire are making any specific effort through the publication of definite "codes" to secure standardization and consequent uniformity of marking throughout the entire school system.

7. One hundred and fifty-five principals report that they believe marks are more likely to be uniform within well organized departments having efficient supervising "heads" or committees. At the same time many principals report that they are unable to detect any improvement due to such organization. The committee desires to suggest that any improvement in the uniformity or distribution of marks within such a department may be due to the fact that the de-

partment head may have been a student in education as well as a specialist in his subject.

PART III

The third part of the questionnaire has to do with two subjects that do not bear quite so directly upon the method of standardizing teachers' marks but whose successful administration rather depends upon such standardization. These are the subjects of: 1. Giving excess credit for superior work, and, 2. The classification of pupils according to ability. The questionnaire reveals that:

1. Of the 262 schools reporting only 30 are giving excess credit for superior work.

2. One hundred and nineteen schools are endeavoring, many of them in only a partial way, to classify pupils according to ability. Of these, 43 are marking all classes on the same basis; 51 are attempting to deal with each class as a unit in itself with some sort of standardized distribution of marks within each class independent of the attainments of the other classes.

RECOMMENDATIONS OF THE COMMITTEE

Any school teacher having had an extended experience in marking pupils must have become thoroughly convinced of the futility of trying to mark on a "percentage" basis. Most teachers of experience are quite willing to admit that they can only "group" pupils with approximate success. That is, instead of attempting to determine whether a grade should be 85 or 86 per cent, the average teacher will do well if she is capable to determining whether it should be 85 or 95 per cent.

1. Therefore, in view of the fact as revealed by the questionnaire that more than two-thirds of the schools, based on enrollment, are now using some form of group system and that one purpose of the appointment of this committee was to take some step toward securing uniformity of marking systems throughout the country, we unhesitatingly recommend the adoption of a group system of marking as opposed to the percentage system.

2. The committee is unable to detect any marked superiority of any one group system over the others. But again in the interests of uniformity we recommend the adoption of the symbols "A, B, C, D, and E" since this system is already in use by an appreciable majority of all the schools now using a group system of marking. In

the application of this system we recommend the method now commonly employed of having four passing groups and a single failing group. That is, that "A, B, C, and D" be used as passing marks and "E" as a failure mark.

(NOTE.—We believe these recommendations to be in line with, although a little less conservative than, a recommendation by Mr. Wilson Farrand in a report to the National Conference Committee on Standards of Colleges and Secondary Schools, March 1, 1918.)

3. We believe that the logic of the two foregoing recommendations demands that we recommend the abandonment of all reference to percentages in marking pupils. We recommend the division of pupils into groups on the basis of certain definite requirements hereinafter stated. School teachers of experience know well that it is impossible to say that the poorest pupils "passed" must have attained to 75 or 65 per cent or even to 50 per cent of the excellence of the best pupils doing the same work. Although the questionnaire reveals but a scant dozen of principals who are trying to eliminate the "percentage fiction," yet we believe that progress in the line of recognizing the limitations in this matter of judging the attainments of pupils demands that we take our stand on the side of the minority in this instance. We therefore recommend the abandonment of all translation scales and the employment of the five-group of markings as given above, the first four marks to be used in distinguishing different groups of "passing" pupils and the fifth to distinguish those who fail.

At the same time, as practical school administrators we realize that through a very long period of familiarity with a percentage system of marks pupils and parents alike are likely to experience some difficulty in fully understanding a new system and are likely to demand the translation of marks into percentages. We therefore recommend the abandonment of percentages as an ideal to be striven toward rather than as an end to be immediately consummated.

4. We are not prepared at this time to recommend for final adoption any specific scale of distribution of marks. It does not appear from our questionnaire that the experiences of high school men with any of the thirty-two scales sent in are sufficiently extensive and satisfactory to warrant the adoption of any of them. We do not even believe that it is feasible or desirable at all times to "bend" our distributions into conformity with the "normal fre-

quency" curve. At the same time we are entirely confident that any scientific distribution of marks based on definite requirements for the several classes **MUST FOLLOW** the normal curve provided a sufficiently large number of cases is taken.

Therefore we do recommend that each high-school administrator provide the teachers of his system with some recognized curve or scale to serve as a tentative, experimental, directing guide in distributing marks. And since the scale attributed to Dr. Rugg is already used in more schools than any other, and since it really is an average scale, we recommend that administrators desiring to experiment with such a scale try out the 7-24-38-24-7 scale.

The committee desires to go on record as deprecating a servile adherence to such a scale as much as it deprecates the more grotesque deviations from it. We look upon all of these devices as servants aiding us to attain our ends and we must not permit them to become masters dominating our actions in a mechanical way.

5. We warmly commend the practices of so many principals of requiring summaries of marks, of examining and discussing them, of graphing them, and comparing the graphs with the normal frequency curve. Such practices are bound to secure greater uniformity both in the markings of individual teachers and also throughout the entire system. These summaries and comparisons should occur at the end of each marking period and not be deferred to the end of the semester.

6. The committee has no recommendations relative to the advisability of giving excess credit for superior work. We do desire to urge, however, the impracticability, not to say absurdity, of attempting to administer such a device until some effective steps have been taken toward standardizing and rendering uniform the teachers' marks. This is more particularly the case in those schools offering wide privileges of election of courses.

7. We likewise make no recommendation relative to the merits of the practice of classifying pupils according to ability. But we are unanimous in thinking that to render the system practical and just marks and promotions must be based upon absolute achievement and not upon relative merit within small homogeneous groups. And to this end we urge the necessity for establishing very definite minima in the various subjects and demanding that these minima must be mastered as the prerequisite for promotion. We make further reference to the desirability of such a course later in this report.

THE REAL PROBLEM

If we may assume that all of the foregoing recommendations of the committee be adopted there will still remain the overshadowing problem of the assignment of pupils to the various groups established.

It is a very significant fact that of all the twenty-four codes sent to the committee in response to our questionnaire every one provides for the marking of students on the basis of the character of the work done by the individual students rather than upon the achievement of any specific quantity of school work. That is, the codes are, in the main, qualitative rather than quantitative. In the administration of these codes we have no doubt that both quantity and quality of work are considered, but in this statement they are largely qualitative. The committee believes that one of the pressing needs in the direction of solving the marking problem is the preparation of a series of quantitative bases for marking. We refer here to some such basis as has been prepared by Rugg and Clark in first year algebra. Letters from several principals manifesting great interest in the work of the committee urge the necessity of the preparation of such objective bases for marking to the end that definite objective tests may be employed and definite scores thereby fixed. One principal points out in a very effective way that the very legal status of the high school as an institution that grants certain formal certificates demands that such certificates of achievement be put upon an objective basis of actual accomplishments that ought to be standardized as nearly as possible.

The committee is in hearty accord with such a program and recommends to this body as the next appropriate step in the solution of the marking problem the appointment of a committee on objective, or achievement, bases for marking. However, the committee believes that in the present circumstances it will serve the great mass of high school teachers by publishing a summary of the several marking codes presented to it and we therefore submit the following "requirements for the groups":

REQUIREMENTS FOR THE GROUPS

I. SCHOLARSHIP

GRADE "A" REQUIRES

PREPARATION: That the pupil arrive at class daily with all work thoroughly and neatly completed; that he make up promptly, without suggestion from the teacher, all work lost by absence; that he be regularly equipped with all books and materials needed for the work of the class; that he consistently exercise good judgment in the use of his time, do his own work, be able to answer all questions on the lesson clearly and intelligently, and come to class prepared to ask questions intelligently about uncertain or obscure points.

APPLICATION: (a) Attention: Concentration of the mind constantly upon the lesson, seeing and hearing everything that pertains to the lesson and nothing that does not.

(b) Initiative: Frequent contributions to class discussion as a consequence of extensive supplementary reading and investigation in excess of the requirements and suggestions of the teacher; ability to master advance work without aid; originality in planning and executing work; ability to examine and judge data and reach correct conclusions therefrom; ability to discover practical uses of the school subjects and relationships between them and the outside world.

KNOWLEDGE OF SUBJECT: Distinguished achievement due to high grade mental ability combined with serious application: knowledge exceeding demands or even the expectations of the teacher; ability to make sustained "topic" recitations regularly; frequent contributions to class room discussions; ability to retain and recall relationships already discussed; practically no errors in essentials of the lesson, none in any review points and none in papers discussed or corrected in class; ability to correct inaccuracies in oral and written work.

USE OF ENGLISH: Constant use of good English; ability to read all matter incident to high-school education with rapidity and full comprehension; extensive and adequate vocabulary.

PROGRESS: Constant progress in all of the preceding aspects of "scholarship;" growing ability in mastering increasingly difficult subject matter; constant gains in overcoming objectional habits of speech, poor writing, spelling or other unscholarly personal habits.

Progress must be so conspicuous and rapid as to constitute a real problem for the teacher.

IN GENERAL: For a grade of "A" the pupil must exceed the normal expectations of the teacher in all of the aspects of scholarship mentioned.

(NOTE.—The committee does not believe that the five factors included herein under the head of "scholarship" should have equal weight in making up the final marks. In the judgment of the committee the factors should bear weight in about the following proportions: Preparation, 2; Application, 1; Knowledge of Subject, 3; Use of English, 1; Progress, 3.)

GRADE "B" REQUIRES

PREPARATION: Same as for grade "A."

APPLICATION: (a) Attention: Same as for grade "A."

(b) Initiative: Some contributions to class discussions through supplementary reading; evidence of considerable originality; ability to take advance work with very little aid; dependability in getting through a difficult task.

KNOWLEDGE OF SUBJECT: Superior achievement although the pupil may fall below in some one particular mentioned for grade "A"; knowledge equivalent to demands of teacher—such as may result from superior native ability coupled with fair application or medium ability and superior application.

USE OF ENGLISH: Same as for grade "A."

PROGRESS: Must be positive and noticeable but not so rapid as to call for any special treatment by the teacher. Pupil must show good ability in discarding unscholarly habits and forming correct habits.

GRADE "C" REQUIRES

PREPARATION: Approximately the same as for grades "A" and "B" but, in general, less consistent and dependable.

APPLICATION: (a) Attention: Positive, not demanding special devices on the part of the teacher; ability of concentration below that shown by "A" and "B" pupils.

(b) Initiative: Only occasional contributions to class discussions; strength in one or more phases mentioned for grade "A" and

weakness in others ; vigor in attacking new problems but lack of persistence, requiring considerable encouragement and aid.

KNOWLEDGE OF SUBJECT: Ordinary achievement due to ordinary ability and application, rather poor ability with good application or fair ability and inferior application ; reasonable mastery of the main essentials of the lesson but only moderate ability to understand and appreciate the broader relationships ; ready ability to understand and apply corrections ; in general, such a knowledge of the subject as falls a little below the reasonable expectations of the teacher.

USE OF ENGLISH: Fairly satisfactory English ; somewhat hampered by limited vocabulary ; ability to read with moderately good speed and comprehension.

PROGRESS: Noticeable in most directions, barely appreciable in some.

GRADE "D" REQUIRES

PREPARATION: Daily assignments barely covered ; work lost by absence made up only as the result of some urging ; written work rather carelessly done, frequently necessitating rewriting ; disposition to seek help from fellow students ; on the whole, however, evidence of a fairly honest effort to cover the minimum requirements.

APPLICATION: (a) Attention: Wavering ; not a positive menace to the order of the class, yet demanding some special attention on the part of the teacher ; ability to concentrate very feeble.

(b) Initiative: Very little evidence of initiative ; passive receptivity ; narrow realm of interests ; few, fragmentary or no voluntary contributions to class discussions.

KNOWLEDGE OF SUBJECT: Mastery of barely minimum requirements ; reasonable understanding of most of the points covered but with little or no originality in discovering significant relationships ; very feeble ability to make sustained, independent, topic recitations ; achievement considerably below the average of the class.

USE OF ENGLISH: Limited vocabulary ; mastery of the bare minimum requirements of the English Department as to form, thought and neatness of written composition ; habits of incorrect oral speech very persistent.

PROGRESS: Appreciable in some lines ; very slow ; unscholarly habits very persistent.

(NOTE.—A reading of the meager requirements for grade "D" must prompt one to inquire whether or not so poorly equipped a student should be "passed." Undoubtedly a student might comply with the requirements for a grade of "D" and still achieve no more than 60 per cent or even 50 per cent of the attainments of a student who earns an "A.")

GRADE "E" (FAILURE) REQUIRES

PREPARATION: Persistence in careless, partial, or no attempt to prepare assignments; indifference about making up lost work or refusal to do so; partial or no equipment with materials requisite to class work; persistent waste of time; inability to work alone; inability to give intelligent answers to simple questions about essential points of the assignment; insufficient knowledge of interest to ask questions about any points.

APPLICATION: (a) Attention: vacillating, listless or negative attention leading to failure to understand instructions, class discussions or assignments; occasionally or frequently a menace to the order of the class.

(b) Initiative: lacking; work not ready on time; no originality in preparing lesson, apparent inability to follow directions; disinclination to attack a new problem; lack of persistent effort; inability to plan and execute; no contributions to class discussions.

KNOWLEDGE OF SUBJECT: Inability and failure to make topic recitations; inability to do more than make a few fragmentary statements about essential points of the assignment; inability to retain and recall matter previously discussed in class or to reproduce explanations; knowledge generally meager and inadequate.

USE OF ENGLISH: Persistent use of incorrect form; inability to read ordinary high-school material with either speed or comprehension; very meager, wholly inadequate vocabulary.

II. SCHOOL CITIZENSHIP

GRADE "A" REQUIRES

CO-OPERATION: Hearty co-operation with office, faculty and fellow pupils for the best interests of the school; helpfulness of such high value as to be stimulating to teachers and pupils alike; active in promoting all group activities.

PERSONAL CONDUCT: Highest type of personal conduct, serving as an example, stimulating and guiding fellow pupils; no necessity for suggestion or direction from the teacher.

CIVIC CONSCIENCE: Respect for the rights and privileges of others; especially an active effort to preserve and protect school property as opportunity arises.

RELIABILITY: Absolute dependability at all times; promptness and regularity in all phases of school life; inspiring complete confidence on the part of co-workers.

LEADERSHIP: The "gift" of leadership; positive and persistent contributions to the success of the school as to both its instructional function and its social life.

GRADE "B" REQUIRES

The standards of cooperation, personal conduct, civic conscience, reliability and leadership should be the same for grade "B" as for grade "A." Failure to score perfect in one or more of these lines will be sufficient to warrant for assignment to class "B" instead of "A."

GRADE "C" REQUIRES

Grade "C" will be given to such students as are "academically" loyal to all the principles announced for grade "A" but who lack the initiative or energy or interest actively to practice them. Pupils who neither actively oppose nor actively promote the best interests of the school will earn "C" in citizenship.

GRADE "D" REQUIRES

CO-OPERATION: Thoughtlessness or indifference about co-operation in classrooms, assemblies, lunchrooms, or elsewhere on school premises; little or no interest in school activities.

PERSONAL CONDUCT: Erratic; unwillingness to assume personal responsibility for influence upon other pupils; frequent deviations from the highest ideals of social conduct.

CIVIC CONSCIENCE: Not active; indifference about the destruction of school property even when directly observed; frequent infringements of the rights of fellow pupils.

RELIABILITY: Not thoroughly dependable; occasionally

tardy or absent without adequate excuse; practice of numerous small deceptions.

LEADERSHIP: None, in the best sense; disposition to question or dispute the leadership of others.

GRADE "E" REQUIRES

CO-OPERATION: None; active opposition to the best interests of the school; more or less active enmity to the authorities.

PERSONAL CONDUCT: Destructive and demoralizing personal conduct; a disposition to violate laws and rules.

CIVIC CONSCIENCE: Little or none; destruction and defacement of school property; appropriation and destruction of the property of others; unsocial conduct throughout.

RELIABILITY: Very unreliable; frequent absence and tardiness without adequate excuse; truancy; falsification and deceit.

LEADERSHIP: If a leader, then of the "anarchistic group."

DIFFICULTIES

Practical teachers will immediately find well nigh insuperable objections to the use of so formidable an array of "specifications" as is included in this code. The list is too long and it is only through the most persevering search that any pupil will be found to whom the specifications for any group apply so well that he will be unquestionably located. The committee is not disposed to urge the adoption of this code but it does recommend that teachers and principals prepare some specific definition of groups to help in classifying pupils. Possibly a brief outline or sort of "score card" would be of considerable assistance in the classification. We submit the following, based on the "Requirements for the Groups" and trust it may be helpful to those who desire to attempt a somewhat more uniform system of marking than has hitherto prevailed.

1. SCHOLARSHIP

PREPARATION:

- A. Complete, regular, exhaustive supplementary reading exceeding expectations of teacher.
- B. Same as for A with somewhat less extensive supplementary reading and investigation.

- C. Meeting the demands and suggestions of the teacher. No supplementary work on own initiative.
- D. Barely covering minimum daily assignments.
- E. Careless, partial, inefficient, indifferent.

APPLICATION:

- A. (1) Attention: 100 per cent—complete concentration.
(2) Initiative: High grade originality and ingenuity in research.
- B. (1) Attention: Same as for A.
(2) Initiative: Dependable; considerable originality.
- C. (1) Attention: Ordinary.
(2) Initiative: Not noteworthy; requires considerable encouragement and aid.
- D. (1) Attention: Wavering, uncertain, feeble.
(2) Initiative: Not appreciable; helpless on new work.
- E. (1) Attention: Negative, a disturbing factor.
(2) Initiative: Little or none; unable to follow directions.

KNOWLEDGE OF SUBJECT:

- A. Distinguished achievement; complete mastery; exceeding expectations.
- B. Superior achievement but less complete mastery.
- C. Ordinary achievement; meets teacher's requirements.
- D. Mastery of a bare minimum for passing.
- E. Very meager, fragmentary, inadequate.

USE OF ENGLISH:

- A. Extensive vocabulary, excellent diction, correct habits. Rapid comprehending reader.
- B. Same.
- C. Limited vocabulary, fair reader, errors persistent.
- D. Inadequate vocabulary, slow inefficient reader, mastering barest minimum essentials.
- E. Inability to "read;" slovenly speech, very deficient vocabulary.

PROGRESS:

- A. So rapid as to constitute a teacher's problem.
- B. Rapid but not disturbing.
- C. Noticeable and steady.
- D. Discouragingly slow.
- E. Inappreciable.

We make no claim whatever of originality in this table of requirements. At the same time it does not seem feasible to give specific credit to each source from which we have drawn material. We especially acknowledge our indebtedness to the following schools—named alphabetically rather than in the order of our indebtedness: Charleston, W. Va., Cleveland Central, Dubuque High School, Fergus Co., Mont., Muskogee, Omaha High School of Commerce, Pittsburgh, Fifth Avenue High School, Topeka, Tucson, Tulsa.

Several of the codes sent us recognize two factors entering into the estimate of any pupil's desirability as a member of the school society, namely: scholarship and citizenship. We give the requirements for these two factors separately, although some teachers may desire to combine the two factors in giving a single mark.

The committee assumes that these requirements presuppose a type of teaching that is well nigh perfect. Assignments must be adequate, yet reasonable, with as great a degree of differentiation as possible according to the varying ability of the pupils. Instruction must be clear, comprehensive, and skillfully presented. It seems evident that 100 per cent attention cannot be demanded nor expected from pupils who have nothing to do and they should not be penalized for inattention if there is nothing in progress in the recitation designed to challenge and hold their attention.

It may be that there should be prepared and promulgated by this association a set of "teaching requirements" guaranteeing instruction of such a character as to warrant the expectation of "A" work on the part of the best pupils.

BIBLIOGRAPHY

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Sch. Rev. Vol. XXV, No. 5, p. 305.
A report of the system adopted in the Kansas City (Kas.) Central High School. Illustrations of the requirements for various grades in several subjects. Also some reference to the need for a distribution scale.
2. BEESON, MARVIN F.—"School Marks in the High School."
Sch. Adm. and Supv. Vo. VII, No. 7, p. 380.
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3. BENDICT, H. Y.—“Standardization of Grades at the University of Texas.”
Sch. and Society Vol. 3, 1916—pages 105-107.
Gives a perceptible distribution based on University of Texas experience and gives a series of instructions which were given to their teachers, intended to secure a more uniform grade distribution.
4. CAJORI, FLORIAN—“A New Marking System and Means of Measuring Mathematical Abilities.”
Sch. Sci. and Math. Vol. XIV, No. 14, p. 283.
Urges first the ranking of the pupils and then the distribution according to the normal probability curve.
5. CAMP, FREDERICK S.—“Some Marks: An Administrative Problem.”
Sch. Rev. Vol. XXV, No. 10, p. 697.
Discussion of marks in Stamford, Conn., High School. A campaign on distribution was carried on. Favored the use of normal probability curve. Discussion of the meaning of “pass” and “100%.”
6. COLVIN, S. S.—“Introduction to High School Teaching.”
Macmillan, 1917, p. 39, p. 157.
7. DEARBORN, W. F.—“School and University Grades.” University of Wisconsin, 1910.
A resume of other studies and a study of grades given in the University of Wisconsin.
8. FINKLESTEIN, I. E.—“Marking System in Theory and Practice.”
Favors five division distribution. Questions the use of percentile system. A study of marks at Cornell University. Reports a shewed curve.
9. FOSTER, HERBERT H.—“Principles of Teaching in Secondary Education.”
1921; p. 288, p. 292, p. 303-4, p. 307; Scribner's.
Suggests a desirable distribution according to normal probability curve. Suggests the need for comparison of marks with those of other teachers.
10. GRAY, CLARENCE T.—“Variations in the Grades of High School Pupils.”
A monograph. A study of high-school grades in a number of Chicago and Indiana schools. Discusses variability. Urges scientific study of the problem.
11. GRIFFEY, ————A Master's Thesis in typewritten form—Educational Library, University of Chicago.
A study made of a Michigan high school of about four hundred pupils by the principal, later superintendent in charge. He gives methods used and results secured.
12. JAGGARD, GUY H.—“Improving the Marking System.”
Sch. Adm. and Supv. Vol. V, No. 1, p. 25.
A report of a study made in Lawrence, Kansas, schools. Offers a distribution according to normal curve, with suggestions as to what each “grade” meant.
13. JOHNSON, F. W.—“Study of High School Grades.”
Sch. Rev. Vol. 19, January, 1911.
Study showing the wide variance of teacher's marks.

14. JORDAN, R. H.—"Variations of Marking Systems as Diagnosed by Objective Tests."
Jr. of Ed. Research, Vol. IV, No. 3, p. 173.
 A report of a study of 2,076 children in Minneapolis and St. Paul. Variation in marks between buildings. Urges the use of intelligent tests.
15. JUDD, C. H.—"Scientific Study of High School Problems."
Sch. Rev. Vol. 19, February, 1910.
 "Comparison of Grading Systems."
Sch. Rev. Vol. 18, September, 1910.
 The first of these articles states the problem of the variation of teachers' marks; the second shows the inequality of the same grade when coming from different schools or even from the same school and urges the appointment of a committee by the North Central Association, to whom the address was delivered, to secure standardization of teachers' marks.
16. KELLY, FREDERICK JAMES—"Teachers' Marks." 1914 Columbia Contribution No. 66.
 A thesis for the doctorate at Teachers' College. Discusses wide variation in distribution and the uncertainty of the meaning of any specific mark as, for instance, "70."
17. KYTE, GEORGE C.—"The Evolution of a Marking System from Chaos to Order."
Sch. Adm. and Supv. Vol. VI, No. 1, p. 9.
 A report of a campaign carried on in the Whittier School, Berkeley, Calif. Definition of the meaning of each mark.
18. MASTERS, H. G.—"Standards for Rating Pupils."
Jr. of Ed. Method, Vol. 1, No. 5, p. 176.
 A brief account of a co-operative grading system worked out in Beechview-Beechwood Schools in Pittsburgh. Pupils able to measure themselves fairly well. Marked on; knowledge of subject-matter, preparation, attitude, and application. A detailed analysis.
19. MAXWELL, G. E.—"The Grading of Students."
Sch. and Soc. Vol. 6, January, 1917, pp. 113-118.
 Suggestive in methods for the training of teachers. Suggests symbols, their interpretation and a scale of percentiles each should be of the total.
20. MEYER, MAX F.—"The Kind of Scholarship Records to Be Kept in Schools."
University of Missouri Bulletin—Volume 5, No. 32. Educational Series 8, November, 1914.
 This bulletin suggests first a series of blanks to make records available. The author next shows the difference in the distribution of grades by different teachers and urges as a remedy the definition of grades as certain percentages of the entire number of grades assigned over a long period of time. Contains a good bibliography up to November, 1914—the date of its publication.

21. MILLER, W. S.—The Twenty-First Yearbook. Part II, 1922. "The Use of Intelligence Tests in the High School." Chap. VII, pp. 210-222.
22. NEWLON, JESSE H.—"The System of Weighing Scholarship Marks in the Decatur High School." Sch. Adm. and Supv. Vol. III, No. 4, p. 227.
Students may graduate with 14.54 units, for poorest students 17.66 may be required. Under a proposed scheme there would be a possible variation of from 13.33 units to 20 units.
23. PARKER, S. C.—"The Methods of Teaching in High School." Ginn, 1915, p. 377.
The author accepts the Normal curve and offers a distribution apparently founded on cutting off the base line at 3.00 on either side of median.
24. PICKELL, FRANK G.—"Credit for Quality in the Richmond (Ind.) High School. Ed. Adm. and Supv. Vo. III, No. 9, p. 534.
160 credit hours—164 scholarship points. No one graduated with less than 15 credits. Under proposed schemes could be from 14 to 18. Notes and similarity of each teacher's distribution of marks semester after semester. Offers a suggested "normal" curve. Pressure on teacher for high marks.
25. REISNER, EDWARD H.—"Grading System in Use by the Kansas State Agricultural College." Sch. Adm. and Supv. Vo. III, No. 7, p. 419.
Gives the meaning and percentile distribution of marking system. Suggests its value as determining subject-matter to be given a class.
26. ROBERTS, ALEXANDER S.—"A Study of the Marking System of Teachers of the Everett High School." Sch. Adm. and Supv. Vol. III, No. 8, p. 485.
A detailed study in the Everett High School.
27. ROREM, S. O.—"A Grading Standard." Sch. Rev. Vol. XXVII, No. 9, p. 671.
Suggests a five-division marking scale and endeavors to give both positive and negative characteristics of the work which shall justify each mark. Eight characteristics for each mark. However, not a clear distinction between *one* and *two* or *four* and *five*. More applicable to an elementary school than to a high school.
28. RUGG, H. O.—"Statistical Method as Applied to Education." Houghton Mifflin Company, 1917, p. 217.
Favors a five group distribution. Thinks it is best to use normal curve with 2.50 as limits of the base line State normal distribution for a base of 2.50 and also of 3.00 on either side of mean.
29. RUGG, H. O.—"Teachers' Marks and the Reconstruction of the Marking System." El. Sch. Jr. Vol. XVIII, No. 9, p. 1.

A very complete discussion. Objects to marking on the usual percentage scale. Favors normal curve distribution. Offers scale. Urges need for clear word-descriptions of "ability." Thinks pupils should be "ranked." Finally offers a program for reconstructing the marking system. Probably too idealistic for present.

30. RUGG, H. O.—"Marking System with Special Reference to the Marks of Illinois High School Teachers."

Reports of Illinois High School Conference, 1914.

School marks should measure "accomplishment." A five division group is recommended.

31. STARCH, DANIEL.—"Marks as Measures of School Work."
University of Wisconsin.

A rather complete resume of other studies. Discusses units of a marking scale, distribution of marks, methods of overcoming variation. Combines the figures of Birge, Finkelstein, Foster on Harvard and Foster on Missouri to derive a scale of distribution.

32. STEWART, JOHN L.—"Uniformity of Teachers' Marks versus Variability."
Sch. Rev. XXVIII, No. 7, p. 529.

A qualitative system based on semester marks. An education campaign among teachers on marking. A good instance of effect of such a campaign. Medians are used as measures of comparison. Used graphic means of illustration.

33. WELD, LEROY D.—"A Standard of Interpretation of Numerical Grades."
Sch. Rev., Vol. XXV, No. 6, p. 412.

Attempts to formulate a system of evaluating and equating marks irrespective of the variability of teachers in marking.

34. WETZEL, WILLIAM A.—"The Use of the Normal Curve of Distribution in Estimating Students' Marks."

The writer calls attention to the difference between "similar" and "identical" curves. He emphasizes the oft-neglected fact that curves to be comparable need to have equal bases and declares that "bases" in subjects in school have never been made equal. He calls for the use of objective standards.

It was moved by PRINCIPAL J. G. MASTERS OF CENTRAL HIGH SCHOOL, OMAHA, NEBRASKA, that Mr. Whitten's committee be continued and enlarged in scope and in personnel. The motion carried.

The secretary of the Association then read the report of the standing committee on social science.

REPORT OF THE COMMITTEE ON SOCIAL SCIENCE

Two years ago at Cleveland some fifty members of the National Association of Secondary-School Principals agreed with your Committee on Social Science that it is a matter of high importance to the schools of the country that lessons in social and industrial progress be introduced into every high school. It was further agreed by each of these fifty principals that he would prepare, or have prepared, five such lessons and that he would try them out in his school and report them. Your committee pointed out that the making of such lessons is an extra job not nominally a part of the principal's duty. It was argued that just because we have in the United States no constituted agency for the construction of new material which is needed in the schools, the principals had an opportunity to step into the breach as the natural and proper leaders of the school, and thus to do what no one else was likely to undertake. Inspired by this plea, fifty volunteers promised to undertake the task. After two years of patient waiting and correspondence, the committee is now in the possession of eighteen lessons. The evidence is perfectly clear that high-school principals do not regard themselves as the chief agents of society for the construction of a new curriculum material on civics.

Hence, the committee reports a negative result in its experiment, urges the Association to accept this conclusion, and asks your body to dismiss the Committee.

CHARLES H. JUDD, Secretary.

V. K. FROULA.

W. D. LEWIS.

T. J. McCORMACK.

F. G. PICKELL.

W. E. STEARNS.

H. V. CHURCH, Chairman.

The association voted the motion to accept the report and discharge the committee.

PRINCIPAL R. R. COOK OF TOPEKA, KANSAS, HIGH SCHOOL, gave the report of the Committee on Resolutions.

THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS, at its meeting in Chicago, March 2nd, 1922, has obtained from its members the following expression of sentiments hitherto unvoiced, and desires to urge upon the general body of Secondary-School Principals throughout the United States their consideration and acceptance:

(1) That in view of the unsettled and hesitating state of research concerning mental measurements, reasonable caution be exercised by high-school administrators in applying the results of such incomplete research, and that in estimating the worth of any human personality, the ideals of a sane and enlightened American democracy be given precedence over any tendencies toward educational determinism.

(2) That the incoming President of the Association appoint a committee to develop a technique for the supervision of instruction in high schools.

(3) That owing to the rapidly increasing magnitude and complexity of secondary education, provision be made at future annual meetings for sectional programs for Senior, Junior, Cosmopolitan and Community, Rural or Consolidated high schools—in such manner and measure as an appropriate committee may deem fit.

(4) That the principals and associations of principals of smaller secondary schools of all types be encouraged to affiliate with the present association.

(5) That the association condemn the practice of representatives or alumni of colleges offering either directly or indirectly special inducements for high-school athletes to enter their particular colleges, and that measures be taken to make uniform through the country the conditions of eligibility for participation in inter-scholastic high-school contests.

(6) That the adoption of the new National Honor Society be recommended to all high schools of the United States, but that a further committee be appointed to examine the best practices now prevailing in secondary schools for raising the standards of character and scholarship, and to present to the association the results of its inquiries with recommendations tending to lift the levels of academic and civic achievement throughout the whole student body and during all the high-school years.

(7) That a committee be appointed to digest the North Central Association Report of Professor Davis on the duties of the high-

school principal and to report on the reasonable median scope of that functionary's duties.

(8) That, in view of the fact that certain commercial firms appear to be systematically distributing among high-school students immoral and objectionable phonographic literature, the executive committee be authorized to receive information concerning this practice and to take suitable measures to suppress it.

(9) That the warmest thanks of this Association be tendered to its Secretary-Treasurer, Mr. H. V. Church, of Cicero, Illinois, for his faithful and zealous services to its cause, since its inception.

The amendment to the constitution presented by PRINCIPAL JOHN G. L. POTTORF OF MCKINLEY HIGH SCHOOL, CANTON, OHIO, at the 1921 Atlantic City meeting was called for consideration. The amendment strikes out the word "vice-president" and inserts the words "a first vice-president and a second vice-president" in the first line of Article IV.

The amendment, on vote of the Association, carried.

PRINCIPAL JOHN L. STEWART OF PARKERSBURG, PENNSYLVANIA, HIGH SCHOOL, gave the report of the nominating committee:

For President—Edward Rynearson, Principal of Fifth Avenue High School, Pittsburgh, Pennsylvania.

For First Vice-President—Ray H. Bracewell, Principal of the High School, Burlington, Iowa.

For Second Vice-President—Philip W. L. Cox, Headmaster of the Washington School, New York City.

For Secretary-Treasurer—H. V. Church, Principal of J. Sterling Morton High school, Cicero, Illinois.

For Executive Committee—Merle Prunty, Principal of Central High School, Tulsa, Oklahoma.

This motion carried.

The report of the committee on necrology was presented by PRINCIPAL OTTO F. DUBACH OF CENTRAL HIGH SCHOOL, KANSAS CITY, MISSOURI. Mr. Dubach asked PRINCIPAL ARMAND R. MILLER OF MCKINLEY HIGH SCHOOL to speak on the life of Mr. Porter Graves, some time Principal of Manual Training High School, Kansas City, Missouri.

PORTER GRAVES

"It matters not; for go at night or noon,
A friend, whene'er he dies, has died too soon."

These lines were wrung from James Russell Lowell by the death of his friend, the great Agassiz, but they were echoed in the hearts of those who knew and loved Porter Graves, late principal of Manual Training High School, when he died July 10, 1921, just after reaching his forty-eighth birthday. Vigorous, active, with a mind keenly alert to the problems of the day, and particularly to education problems as they affected the lives of his pupils, Porter Graves truly "died too soon," not merely for his family and his friends, but for the community and the state in which he was so outstanding a figure.

Except for his years in college, Mr. Graves' entire life was bound up in Kansas City. Born in Howard County, Missouri, he was brought to Kansas City by his parents the year following. He finished the four years' course at Central High School in three years. He received his A. B. degree from the University of Michigan with the class of 1896. He spent the next year as a teacher of science in the high school at Ludington, Michigan. The year following, he joined the science department at Central. In 1912 he was appointed vice principal at Central, resigning a year later to become principal of Manual.

No mere biographical sketch can record the activities of Porter Graves. He was constantly seeking for avenues which would bring him into more vital relation with the real boy and girl. At Central he organized and conducted a mandolin club. For years he was faculty manager of athletics. At Manual he very quickly won over a faculty torn apart by dissensions, and very skeptical as to the attitude of a man from a rival classical school, toward manual training. He soon proved himself radically in advance even of the views and practices of the founders of Manual. "Help the student to find himself and then help him to help himself" was his watchword.

Space here permits the barest mention of the many activities Mr. Graves established at Manual; a student representative system of government; a school lunch room so conducted by the domestic science department, that the advanced students in that department cooked and served the food at cost; a Manual Bank to encourage

thrift among his pupils, many of whom came from the poorer section of the city; a book exchange to reduce the price of text books; a printing department, in which the \$7,000 worth of equipment was purchased and entirely paid for by the work of the students; an employment bureau, both to direct pupils to good permanent employment away from "blind alley jobs," and to enable boys and girls to remain in school. At one time the weekly pay roll for pupils working during their spare time ran over \$2,000.

But he was not content to be merely an efficient school man. He was a very active member of the City Club, the Chamber of Commerce and the Rotary Club. He constantly brought the attention of those organizations to school needs. Moreover, he was a faithful and active worker in his church and in the Y. M. C. A.

Suffering for a year as only those attacked by internal cancer can suffer, he refused to reduce his work in any respects. Ten days after an almost fatal operation in January, he was back at his post. A second operation in March failed to keep him away. Knowing as he must have known how short a tenure of life he had, he closed his school year and planned actively for the coming year. No one ever heard him complain and few even among his closest friends ever knew the deadly danger of his disease.

Those who knew Porter Graves and who realize all the plans for the advancement of education in his home city that perished with him can only echo with Lowell,

"He died too soon."

EDITH SHEPHERD

Miss Edith Shepherd, principal of the high school at Batavia, Illinois, died in October, 1921.

Miss Shepherd's home was at Maquoketa, Iowa. She was graduated from Grinnell College. Entering the teaching profession, she soon became principal of the high school in her home town. The last year she was there her pupils compiled a little book which they dedicated to her in these words:

"To one who has watched, aided and encouraged the students of Maquoketa High School for the past three years; who has, through her acute perception, shrewd judgment, bright intellect, and penetrating observation, won the admiration of every one who has come into

contact with her, to Miss Shepherd we affectionately dedicate this book."

Miss Shepherd was principal at Batavia four years. One of her pupils there, in the memorial leaflet issued shortly after her death, pays this tribute to her:

"Her noble life of unselfish devotion will be a constant inspiration to all of us, and we hope that her ideals will always be the ideals of Batavia High School."

MR. RYNEARSON as President of the National Council of The National Honor Society for Secondary Schools nominated Principal C. M. Wing of Deering High School, Portland, Maine; Principal H. V. Kepner, West High School, Denver, Colorado, and Principal Merle Prunty of Central High School, Tulsa, Oklahoma, to fill the annual vacancies in National Council. On vote the Association elected these nominees.

PRINCIPAL L. W. SMITH OF JOLIET TOWNSHIP HIGH SCHOOL moved that a committee of one be appointed as a member of a joint and continuing committee of this Association and the Association of Collegiate Registrars on Uniform Certificate Blank. (President Rynearson later appointed Mr. Smith as a member of the joint committee.)

PRINCIPAL L. W. SMITH presented a motion of Principal G. W. Willett of Hibbing, Minnesota, High School, that the President appoint in each state a high-school principal who shall promote the interests of and increase the enrollment in the Association. This motion prevailed. Mr. C. P. Briggs, principal of Lakewood, Ohio, High School, suggested that these state directors urge the local boards of education of their respective states to send their high-school principals to the annual meetings of the Association. Mr. Smith accepted this suggestion as a part of the motion he had presented for Mr. Willett.

PRINCIPAL J. G. MASTERS OF CENTRAL HIGH SCHOOL, OMAHA, NEBRASKA, presented an amendment to the constitution as follows:

Proposed amendment to Article IV of constitution of National Association of Secondary-School Principals:

It shall be the further duty of the secretary-treasurer to collect all addresses and papers presented at each annual meeting and pub-

lish same in a yearbook, to mail such year book to members, to publish and distribute the annual program and such other papers and reports as the association may provide. The secretary-treasurer shall receive annually an honorarium of two hundred dollars in connection with this office.

The Chairman of the Auditing Committee, Principal G. W. WILLETT OF HIBBING, MINNESOTA, HIGH SCHOOL, reported for his committee that the books and accounts of the treasurer had been looked over and that the report which follows is correct:

REPORT OF TREASURER

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

February 1, 1921, to December 31, 1921

Presented at Chicago, Illinois, March 2, 1922

RECEIPTS

Balance in bank, February 1, 1921.....	\$ 293.97	
Annual dues	\$872.05	
Sale of Yearbooks.....	21.50	\$893.55
Honor Society Fees.....	70.00	
Sale of Uniform Certificate Blanks.....	4.50	968.05
		<hr/>
		\$1,262.02

EXPENDITURES

Printing and postage	\$ 45.75		
Printing (Edwin L. Miller's questionnaire).....	23.50		
Uniform Certificate Blank (printing).....	9.00		
Honor Society (mailing constitution from E. High School, Cincinnati, O.).....	8.50		
Yearbooks			
Fourth			
Balance on printing.....	\$403.66		
Cartage .....	.50		
Postage	20.00		
Fifth			
Printing	353.42		
Envelopes	8.22		
Postage	25.00	\$810.80	\$897.55
			<hr/>
Balance in bank December 31, 1921.....			\$364.47

On motion the Association adjourned.

MEETINGS OF THE NATIONAL COUNCIL OF THE NA-
TIONAL HONOR SOCIETY FOR SECONDARY
SCHOOLS AT HOTEL LA SALLE

Sunday, February 26, 1922

Present: Mr. C. P. Briggs, Lakewood High School, Lakewood, Ohio; Mr. L. W. Brooks, Wichita High School, Wichita, Kansas; Mr. E. J. Eaton, South High School, Youngstown, Ohio; Mr. M. R. McDaniel, Oak Park High School, Oak Park, Illinois; Mr. Edward Rynearson, Fifth Avenue High School, Pittsburgh, Pennsylvania; Mr. Lewis W. Smith, Joliet Township High School, Joliet, Illinois; and the secretary, Mr. H. V. Church, J. Sterling Morton High School, Cicero, Illinois.

It was moved by Mr. Brooks and seconded by Mr. McDaniel that Mr. Rynearson be chairman of the meeting.

It was moved by Mr. Smith and seconded by Mr. Briggs that the form and content of the charter for the chapters be adopted. The motion was amended by Mr. Eaton to have the words "worthy of encouragement" stricken out and the words "to be encouraged" inserted. The amendment lost. The original motion was then put and prevailed.

On motion of Mr. Brooks and seconded by Mr. Briggs the emblem submitted was adopted.

It was moved by Mr. Smith and seconded by Mr. Brooks that the reverse of the emblem pin may be inscribed with nothing but the name of the chapter and school, the name of the member, and the date of his membership. This motion carried.

It was moved by Mr. Eaton and seconded by Mr. McDaniel that the emblem be of the fineness of ten carats and of fourteen carats gold. Carried.

It was moved by Mr. Brooks and seconded by Mr. McDaniel that the size and weight of the emblem be determined by the president and secretary. This motion carried.

It was moved by Mr. Smith and seconded by Mr. Eaton that the emblem have two forms of fastening; the safety clasp or a screw button. The motion carried.

It was moved by Mr. Briggs and seconded by Mr. Smith that Article V, section 1, be interpreted that the fee of \$5.00 for the charter preclude a collection of dues for twelve months. This motion carried.

It was moved by Mr. Smith and seconded by Mr. Briggs that electros of the signatures of the National Council be used in the execution of the charters. The motion carried.

It was moved by Mr. Smith and seconded by Mr. McDaniel that Article II be amended by the addition of Section 5 as follows: The National Council shall each year nominate three members to be elected by the National Association of Secondary-School Principals to succeed those whose terms expire. This motion prevailed.

On motion of Mr. Brooks and seconded by Mr. Briggs, Principal H. V. Kepner of West High School, Denver, Colorado; Principal William E. Wing of Deering High School, Portland, Maine, and Principal Merle Prunty of Central High School, Tulsa, Oklahoma, were named as nominees to fill the annual vacancies of the National Council. This motion carried.

It was moved by Mr. Smith and seconded by Mr. McDaniel that the constitution be revised by striking out at all points the words "local societies" and substituting the word "chapter." This motion carried.

It was moved by Mr. Smith and seconded by Mr. McDaniel that a sufficient number of copies of the constitution be printed to supply all demands. The motion carried.

It was moved by Mr. Briggs and seconded by Mr. McDaniel that Mr. Rynearson be chosen president of the National Council. Carried.

It was moved by Mr. Eaton and seconded by Mr. Briggs that the president be empowered to appoint such committees as is necessary to expedite the work of the council. This motion carried.

Lots were drawn and resulted in Mr. Briggs, Mr. McDaniel and Mr. Rynearson being chosen for the three-year term; in Mr. Brooks, Mr. Eaton and Mr. Smith for the two-year term, and in Miss Fennimore, Mr. Lyon and Mr. Paul for the one-year term.

It was moved by Mr. Eaton and seconded by Mr. Briggs that these terms begin with March 1, 1922.

It was moved by Mr. Eaton and seconded by Mr. McDaniel that the council adjourn, to meet on Thursday, March 2, 1922.

THURSDAY, MARCH 2, 1922, AT HOTEL LA SALLE

Present: Mr. Briggs, Mr. Eaton, Mr. McDaniel, Mr. Rynearson, Mr. Smith, Mr. Kepner, Mr. Wing, and Mr. Church. President Rynearson called the meeting to order. The secretary reported that

Mr. H. V. Kepner, principal of West High School, Denver, Colorado, Mr. Wing of Deering High School, Portland, Maine, and Mr. Merle Prunty of Central High School, Tulsa, Oklahoma, were chosen as members to fill the vacancies of Mr. Lyon, Miss Fennimore and Mr. Paul.

On motion of Mr. Wing and on second of Mr. Briggs the secretary was instructed to have reprints made of Mr. Ryneearson's paper on *Honor Chapters*. This motion prevailed.

It was moved by Mr. Eaton and seconded by Mr. Kepner that 200 copies of the charter be engraved. Carried.

It was moved by Mr. Eaton and seconded by Mr. Smith that the torch and hand be made more prominent in the emblem. Carried.

President Ryneearson appointed the following committees: Committee on Emblems, Mr. Smith and Mr. Prunty; Committee on Publicity, Mr. Eaton, Mr. Briggs, Mr. Brooks, Mr. Wing and Mr. Kepner; Committee on Applications, Mr. McDaniel and Mr. Ryneearson.

CONSTITUTION
OF THE
NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

ARTICLE I—AIM

The aim of this Association is to promote the interests of secondary education in America by giving special consideration to the problems that arise in connection with the administration of secondary schools.

ARTICLE II—MEMBERSHIP

Any principal or executive head of a secondary school may become a member of the National Association of Principals of Secondary Schools upon the payment of two dollars.

The annual dues of members are two dollars, which shall be paid at the time of the annual meeting of the Association, or before April 1 of each year. A member forfeits his membership by failure to pay the year's dues.

The right to vote and hold office in the Association is open to all members whose dues for the year have been paid.

ARTICLE III—COMMITTEES

The president of the Association shall at the first session of the annual meeting appoint the following committees: A committee on resolutions to consist of seven members; a committee on nominations to consist of eleven members; a committee of necrology to consist of five members. These committees shall report at the annual business meeting of the Association.

ARTICLE IV—OFFICERS

The officers of the Association are a president, a first vice-president and a second vice-president, a secretary, a treasurer (or a secretary-treasurer), an executive committee of the four officers named, *ex officio*, and three additional members.

The duties of the president, vice-president, secretary, and treasurer are such as usually appertain to these officers. It is the duty of the executive committee to co-operate with the president in preparing the program of the meetings of the Association, and in carrying out the actions of the Association.

ARTICLE V—MEETINGS

The Association will hold one meeting a year. This annual meeting is held at the time and place of the meeting of the Department of Superintendence of the National Education Association.

ARTICLE VI—AMENDMENTS

The constitution may be amended by a majority vote of those present and voting at the annual meeting. A proposed amendment must be submitted in writing at the preceding annual meeting, or must be submitted in printed form to all members of the Association thirty days before the annual meeting. In case the latter method is used, such proposed amendment must receive the approval of the Executive Committee before it can be printed and sent to the members of the Association.

